



STATE OF VERMONT

Cary Giguere
Vermont Agency of Agriculture, Food & Markets
116 State Street
Montpelier, Vermont 05620
(802) 828-1410

REQUEST FOR PERMIT TO CONDUCT RIGHTS-OF-WAY SPRAYING

Request is hereby made, pursuant to Title 6 V.S.A., Chapter 87 and the regulations issued pursuant thereto, for an approved permit to conduct spraying on rights-of-way within the State of Vermont.

A. General Information

1. Title of Organization: Vermont Railway
2. Address: 118 Post Street
Rutland, VT 05701
3. Telephone Number: (802) 775-4356
4. Contact Person: R.T. Boucher

5. Type of Right-of-Way:

- a. Electric Power Transmission Line
- b. Electric Power Distribution Line
- c. Telephone Line
- d. Highway
- e. Pipeline (Specify: Gas, Soil, Water)
- f. Railroad
- g. Airport Approaches and Safety Zones
- h. Other - Describe _____

6. Type of Treatment

- a. Selective Basal
- b. Stump Treatment
- c. Dormant Cane (Broadcast Basal)
- d. Soil Applications (Soil Sterilant)
- e. Ground Broadcast Stem-Foliage
- f. Stem Injection (Frill Treatment)
- g. Other - Describe: _____



116 STATE STREET
DRAWER 20
MONTPELIER, VT 05620-2901

7. Railroad Right-of-Way Treatment

- a. Ballast
 b. Shoulder

B. Site Specific Information

1. List Towns where Treatment will be made:

Burlington, S. Burlington, Shelburne, Charlotte, Ferrisburgh, Vergennes
New Haven, Middlebury, Salisbury, Leicester, Brandon, Pittsford, Rutland Town
Rutland City, Clarendon, Wallingford, Danby, Mt. Tabor, Dorset, Manchester
Sunderland, Arlington, Shaftsbury, Bennington

2. Total Acreage to be Treated	Total Acres: <u>630</u>
Ground Application	Acres: <u>630</u>
3. Width of Right-of-Way	Feet: <u>25' - 160'</u>
4. Width of Area In Right-of-Way to be Treated	Feet: <u>24'</u>
5. Anticipated Starting Date:	<u>5/1/2022</u>

C. Special Needs - Treatment Within Buffer Strips

1. Specific Areas where Application is to be Made:

Spray a 24 foot pattern when applying 1st application formulations
Spray around signal cases,mast,mile post & whistle post for a distance of 20' preceding and
20' proceeding
Spray wider than 24' between tracks in rail yards
Spray around stored material.
Spray up to 2' of waters edge
Spray public road crossings and designated private crossings 300' prior to and complete
treatment 300' after each crossing for a lateral distance of 12' beyond the roadbed pattern
during the first application.

2. Type of Vegetation to be Controlled:
Weeds, Grasses and Broadleaves.

3. Pesticide(s) to be Applied (List Here and in Section E):
53.8% Glyphosate (Aquaneat) or (Roundup Custom)

4. Rate of Application (List Here and in Section E):
53.8% Glyphosate - 2 quarts per acre

5. Application Technique to be Implemented:

Spot Application

6. Application Equipment to be Used:

Highrail truck with nozzles fixed booms 18" above rail

7. Explain how this Request will Protect Sensitive Areas, Sensitive Crops, Site Conditions, Wells, etc.:

Sensitive areas identified in the field will be flagged prior to spraying

D. Contractor Information

1. Contractor's Name: Brian Chateauvert
2. Company Name: RWC, Inc.
3. Company Address: PO Box 876, 248 Lockhouse Road
Westfield, MA 01086-0876
4. Current Vermont Applicator Certificate Number: 75-A
5. Company Telephone Number: (413) 562-5681

E. Control Details

Pesticides to be used and rates to be applied. If more than one chemical is listed, a summary of the uses intended for each chemical must be provided. The summary should state whether the chemical will be mixed or applied separately, specifying which chemicals will control what types of vegetation. (Please Note: A copy of a label, MSDS sheet and EPA Fact Sheet [if available] must be supplied for each chemical to be used.)

Trade Name	Common Name of Active Ingredient(s)	EPA Reg. Number	Applic. Rate Product/Acre	Vegetation to Be Controlled	Type of Application and Equipment to be Used
Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	1qt/acre 1qt/acre 1pt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail
Esplanade 200 SC	Indaziflam	432-1516	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
Method 240SL	Aminocyclopyrachlor	432-1565	8 ozs/acre	Weeds, Grass, Broadleaves	Aquaneat or Roundup Custom, Esplanade 200SC Oust Extra to be mixed in 30/40 gal. of water per acre
Oust Extra	Metsulfuron Methyl Sulfometuron Methyl	432-1557	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
*Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	2 qts/acre 2 qts/acre 1qt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Glyphosate to be mixed in 30/40 gallons

* Please Note: A drift control agent will be added to formulations to reduce the chance of drift to non-targeted areas and the post-emergent treatments, in addition to a drift control agent, will have an adjuvant/spreader sticker added to allow for better intake of the herbicide by the plant. Nufarm(Aquaneat) and Bayer (Roundup Custom) both contain 5.4 pounds per gallon glyphosate. Nufarm (Diquat SPC 2L) contains 3.73 pounds diquat dibromide per gallon

F. Methods of Notification

1. List the Newspapers in which you will Advertise this Application to Comply with Section IV, 4.b., of the Vermont Regulations for Control of Pesticides.

Burlington Free Press, Rutland Herald, Addison Independent, Bennington Banner

2. Please Indicate Other Notification Option Chosen to Comply with Section IV, 4.c, of the Vermont Regulations for Control of Pesticides.

Radio Messages

G. Other Information To Be Submitted With Application

1. Two (2) Sets of Geodetic (in 7.5 minute scale) or Orthophoto Maps indicating the Right-of-Way to be Treated. (Only one set of maps is needed if maps have been previously submitted and revisions have not been made.)
2. Current Labelling for each Pesticide to be used. Previously submitted by RWC, Inc.
3. Current Material Safety Data Sheet (MSDS) for each Pesticide to be Used.
Previously submitted by RWC, Inc.
4. Current Environmental Protection Agency Pesticide Fact Sheet (if available).

The undersigned accepts full responsibility for all statutes and regulations of the State of Vermont and understands that any authorization is limited to the described materials, locations and time periods stated herein.

The undersigned further understands that weekly spray and dusting operations must be reported to the Vermont Department of Agriculture. Such written report shall be on forms furnished by the Commissioner of Agriculture and placed in the mail not later than the close of business on the Monday following the week's operation.

2-14-22

Date



Signature of Applicant

(NOTE: Additional Sheets may be attached to include further information.)



STATE OF VERMONT

Cary Giguere
Vermont Agency of Agriculture, Food & Markets
116 State Street
Montpelier, Vermont 05620
(802) 828-1410

REQUEST FOR PERMIT TO CONDUCT RIGHTS-OF-WAY SPRAYING

Request is hereby made, pursuant to Title 6 V.S.A., Chapter 87 and the regulations issued pursuant thereto, for an approved permit to conduct spraying on rights-of-way within the State of Vermont.

A. General Information

1. Title of Organization: Clarendon & Pittsford RR
2. Address: 118 Post St
Rutland, VT 05701
3. Telephone Number: (802) 775-4356
4. Contact Person: R.T. Boucher
5. Type of Right-of-Way:

- a. Electric Power Transmission Line
- b. Electric Power Distribution Line
- c. Telephone Line
- d. Highway
- e. Pipeline (Specify: Gas, Soil, Water)
- f. Railroad
- g. Airport Approaches and Safety Zones
- h. Other - Describe

6. Type of Treatment

- a. Selective Basal
- b. Stump Treatment
- c. Dormant Cane (Broadcast Basal)
- d. Soil Applications (Soil Sterilant)
- e. Ground Broadcast Stem-Foliage
- f. Stem Injection (Frill Treatment)
- g. Other - Describe: _____



116 STATE STREET
DRAWER 20
MONTPELIER, VT 05620-2901

7. Railroad Right-of-Way Treatment

- a. Ballast
 b. Shoulder

B. Site Specific Information

1. List Towns where Treatment will be Made:
Pittsford, Rutland Town, West Rutland, Ira, Castleton, Fair Haven

2. Total Acreage to be Treated	Total Acres: <u>175</u>
Ground Application	Acres: <u>175</u>
3. Width of Right-of-Way	Feet: <u>25' - 150'</u>
4. Width of Area In Right-of-Way to be Treated	Feet: <u>24'</u>
5. Anticipated Starting Date	<u>5/1/2022</u>

C. Special Needs - Treatment Within Buffer Strips

1. Specific Areas where Application is to be Made:
Spray a 24' foot pattern when applying 1st application formulations
Spray around signal cases, mast, mile post and whistle post for a distance of 20' preceding and 20' proceeding
Spray wider than 24' between tracks in rail yards
Spray around stored materials.
Spray up to 2' of waters edge
Spray public road crossings and designated private crossings 300' prior to and complete treatment 300' after each crossing for a lateral distance of 12' beyond the roadbed pattern during the first application.
2. Type of Vegetation to be Controlled:
Weeds, Grasses and Broadleaves.
3. Pesticide(s) to be Applied (List Here and in Section E):
53.8% Glyphosate (Aquaneat) or (Roundup Custom)
4. Rate of Application (List Here and in Section E):
53.8% Glyphosate - 2 quarts per acre

Request for Permit to Conduct Rights-of-Way Spraying
Page 3

5. Application Technique to be Implemented:

Spot Application

6. Application Equipment to be Used:

Highrail truck with nozzles fixed booms 18" above rail

7. Explain how this Request will Protect Sensitive Areas, Sensitive Crops, Site Conditions, Wells, etc.:

Sensitive areas identified in the field will be flagged prior to spraying.

D. Contractor Information

1. Contractor's Name: Brian S. Chateauvert
2. Company Name: RWC, Inc.
3. Company Address: PO Box 876, 248 Lockhouse Road
Westfield, MA 01086-0876
4. Current Vermont Applicator Certificate Number: 75-A
5. Company Telephone Number: (413) 562-5681

Request for Permit to Conduct Rights-of-Way Spraying

Page 4

E. Control Details

Pesticides to be used and rates to be applied. If more than one chemical is listed, a summary of the uses intended for each chemical must be provided. The summary should state whether the chemical will be mixed or applied separately, specifying which chemicals will control what types of vegetation. (Please Note: A copy of a label, MSDS sheet and EPA Fact Sheet [if available] must be supplied for each chemical to be used.)

Trade Name	Common Name of Active Ingredient(s)	EPA Reg. Number	Applic. Rate Product/Acre	Vegetation to Be Controlled	Type of Application and Equipment to be Used
Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	1qt/acre 1qt/acre 1pt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail
Esplanade 200 SC	Indaziflam	432-1516	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
Method 240SL	Aminocyclopyrachlor	432-1565	8 ozs/acre	Weeds, Grass, Broadleaves	Aquaneat or Roundup Custom, Esplanade 200SC Oust Extra to be mixed in 30/40 gal. of water per acre
Oust Extra	Metsulfuron Methyl Sulfometuron Methyl	432-1557	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
*Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	2 qts/acre 2 qts/acre 1 qt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Glyphosate to be mixed in 30/40 gallons Hyrail truck with fixed boom 18" above rail

* Please Note: A drift control agent will be added to formulations to reduce the chance of drift to non-targeted areas and the post-emergent treatments, in addition to a drift control agent, will have an adjuvant/spreader sticker added to allow for better intake of the herbicide by the plant. Nufarm(Aquaneat) and Bayer (Roundup Custom) both contain 5.4 pounds per gallon glyphosate. Nufarm (Diquat SPC 2L) contains 3.73 pounds diquat dibromide per gallon

F. Methods of Notification

1. List the Newspapers in which you will Advertise this Application to Comply with Section IV, 4.b., of the Vermont Regulations for Control of Pesticides.

Burlington Free Press, Rutland Herald

2. Please Indicate Other Notification Option Chosen to Comply with Section IV, 4.c, of the Vermont Regulations for Control of Pesticides.

Radio Messages

G. Other Information To Be Submitted With Application

1. Two (2) Sets of Geodetic (in 7.5 minute scale) or Orthophoto Maps indicating the Right-of-Way to be Treated. (Only one set of maps is needed if maps have been previously submitted and revisions have not been made.)
2. Current Labelling for each Pesticide previously submitted by RWC, Inc.
3. Current Material Safety Data Sheet previously submitted by RWC, Inc.
4. Current Environmental Protection Agency Pesticide Fact Sheet (if available).

The undersigned accepts full responsibility for all statutes and regulations of the State of Vermont and understands that any authorization is limited to the described materials, locations and time periods stated herein.

The undersigned further understands that weekly spray and dusting operations must be reported to the Vermont Department of Agriculture. Such written report shall be on forms furnished by the Commissioner of Agriculture and placed in the mail not later than the close of business on the Monday following the week's operation.

2-14-22

Date



Signature of Applicant

(NOTE: Additional Sheets may be attached to include further information.)



STATE OF VERMONT

Cary Giguere
Vermont Agency of Agriculture, Food & Markets
116 State Street
Montpelier, Vermont 05620
(802) 828-1410

REQUEST FOR PERMIT TO CONDUCT RIGHTS-OF-WAY SPRAYING

Request is hereby made, pursuant to Title 6 V.S.A., Chapter 87 and the regulations issued pursuant thereto, for an approved permit to conduct spraying on rights-of-way within the State of Vermont.

A. General Information

1. Title of Organization: Green Mountain Railroad
2. Address: 118 Post St
Rutland, VT 05701
3. Telephone Number: (802) 775-4356
4. Contact Person: R.T Boucher
5. Type of Right-of-Way:
 - a. Electric Power Transmission Line
 - b. Electric Power Distribution Line
 - c. Telephone Line
 - d. Highway
 - e. Pipeline (Specify: Gas, Soil, Water)
 - f. Railroad
 - g. Airport Approaches and Safety Zones
 - h. Other - Describe: _____

6. Type of Treatment

- a. Selective Basal
- b. Stump Treatment
- c. Dormant Cane (Broadcast Basal)
- d. Soil Applications (Soil Sterilant)
- e. Ground Broadcast Stem-Foliage
- f. Stem Injection (Frill Treatment)
- g. Other - Describe: _____



116 STATE STREET
DRAWER 20
MONTPELIER, VT 05620-2901

7. Railroad Right-of-Way Treatment

- a. Ballast
 b. Shoulder

B. Site Specific Information

1. List Towns where Treatment will be Made:

Rockingham (Bellows Falls), Chester, Cavendish, Ludlow, Mt. Holly
East Wallingford, Shrewsbury, Rutland Town, Rutland City

2. Total Acreage to be Treated Total Acres: 240
Ground Application Acres: 240
3. Width of Right-of-Way Feet: 66'
4. Width of Area In Right-of-Way to be Treated Feet: 24'
5. Anticipated Starting Date 5/1/2022

C. Special Needs - Treatment Within Buffer Strips

1. Specific Areas where Application is to be Made:

Spray a 24' foot pattern when applying 1st application formulations
Spray around signal cases,mast,mile post and whistle post for a distance of 20' preceding
and 20' proceeding
Spray wider than 24' between tracks in rail yards
Spray around stored materials.
Spray up to 2' of waters edge
Spray public road crossings and designated private crossings 300' prior to and complete
treatment 300' after each crossing for a lateral distance of 12' beyond the roadbed patter
during the first application.

2. Type of Vegetation to be Controlled:
Weeds, Grasses and Broadleaves.

3. Pesticide(s) to be Applied (List Here and in Section E):
53.8% Glyphosate (Aquaneat) or (Roundup Custom)

4. Rate of Application (List Here and in Section E):
53.8% Glyphosate - 2 quarts per acre

Request for Permit to Conduct Rights-of-Way Spraying
Page 3

5. Application Technique to be Implemented:

Spot Application

6. Application Equipment to be Used:

Highrail truck with nozzles fixed booms 18" above rail

7. Explain how this Request will Protect Sensitive Areas, Sensitive Crops, Site Conditions, Wells, etc.:

Sensitive areas identified in the field will be flagged prior to spraying.

D. Contractor Information

1. Contractor's Name: Brian Chateauvert
2. Company Name: RWC, Inc.
3. Company Address: PO Box 876, 248 Lockhouse Road
Westfield, MA 01086-0876
4. Current Vermont Applicator Certificate Number: 75-A
5. Company Telephone Number: (413) 562-5681

E. Control Details

Pesticides to be used and rates to be applied. If more than one chemical is listed, a summary of the uses intended for each chemical must be provided. The summary should state whether the chemical will be mixed or applied separately, specifying which chemicals will control what types of vegetation. (Please Note: A copy of a label, MSDS sheet and EPA Fact Sheet [if available] must be supplied for each chemical to be used.)

Trade Name	Common Name of Active Ingredient(s)	EPA Reg. Number	Applic. Rate Product/Acre	Vegetation to Be Controlled	Type of Application and Equipment to be Used
Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	1qt/acre 1qt/acre 1pt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hytrail truck with fixed boom 18" above rail Hytrail truck with fixed boom 18" above rail Hytrail truck with fixed boom 18" above rail
Esplanade 200 SC	Indaziflam	432-1516	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
Method 240SL	Aminocyclopyrachlor	432-1565	8 ozs/acre	Weeds, Grass, Broadleaves	Aquaneat or Roundup Custom, Esplanade 200SC Oust Extra to be mixed in 30/40 gal. of water per acre
Oust Extra	Metsulfuron Methyl Sulfometuron Methyl	432-1557	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
*Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	2 qts/acre 2 qts/acre 1qt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hytrail truck with fixed boom 18" above rail Glyphosate to be mixed in 30/40 gallons

* Please Note: A drift control agent will be added to formulations to reduce the chance of drift to non-targeted areas and the post-emergent treatments, in addition to a drift control agent, will have an adjuvant/spreader sticker added to allow for better intake of the herbicide by the plant. Nutfarm(Aquaneat) and Bayer (Roundup Custom) both contain 5.4 pounds per gallon glyphosate. Nutfarm (Diquat SPC 2L) contains 3.73 pounds diquat dibromide per gallon

F. Methods of Notification

1. List the Newspapers in which you will Advertise this Application to Comply with Section IV, 4.b., of the Vermont Regulations for Control of Pesticides.

Burlington Free Press, Rutland Herald, Valley News, Claremont Eagle,
Brattleboro Reformer

2. Please Indicate Other Notification Option Chosen to Comply with Section IV, 4.c, of the Vermont Regulations for Control of Pesticides.

Radio Messages

G. Other Information To Be Submitted With Application

1. Two (2) Sets of Geodetic (in 7.5 minute scale) or Orthophoto Maps indicating the Right-of-Way to be Treated. (Only one set of maps is needed if maps have been previously submitted and revisions have not been made.)
2. Current Labelling for each Pesticide previously submitted by RWC, Inc.
3. Current Material Safety Data Sheet previously submitted by RWC, Inc.
4. Current Environmental Protection Agency Pesticide Fact Sheet (if available).

The undersigned accepts full responsibility for all statutes and regulations of the State of Vermont and understands that any authorization is limited to the described materials, locations and time periods stated herein.

The undersigned further understands that weekly spray and dusting operations must be reported to the Vermont Department of Agriculture. Such written report shall be on forms furnished by the Commissioner of Agriculture and placed in the mail not later than the close of business on the Monday following the week's operation.

2-14-22

Date



Signature of Applicant

(NOTE: Additional Sheets may be attached to include further information.)



STATE OF VERMONT

Cary Giguere
Vermont Agency of Agriculture, Food & Markets
116 State Street
Montpelier, Vermont 05620
(802) 828-1410

REQUEST FOR PERMIT TO CONDUCT RIGHTS-OF-WAY SPRAYING

Request is hereby made, pursuant to Title 6 V.S.A., Chapter 87 and the regulations issued pursuant thereto, for an approved permit to conduct spraying on rights-of-way within the State of Vermont.

A. General Information

- | | |
|---------------------------|---|
| 1. Title of Organization: | <u>Washington County RR (Barre)</u> |
| 2. Address: | <u>118 Post St</u> |
| | <u>Rutland, VT 05701</u> |
| 3. Telephone Number: | <u>(802) 775-4356</u> |
| 4. Contact Person: | <u>R.T. Boucher</u> |
| | |
| 5. Type of Right-of-Way: | <ul style="list-style-type: none"> <input type="checkbox"/> a. Electric Power Transmission Line <input type="checkbox"/> b. Electric Power Distribution Line <input type="checkbox"/> c. Telephone Line <input type="checkbox"/> d. Highway <input checked="" type="checkbox"/> e. Pipeline (Specify: Gas, Soil, Water) <input type="checkbox"/> f. Railroad <input type="checkbox"/> g. Airport Approaches and Safety Zones <input type="checkbox"/> h. Other - Describe _____ |
| | |
| 6. Type of Treatment | <ul style="list-style-type: none"> <input type="checkbox"/> a. Selective Basal <input type="checkbox"/> b. Stump Treatment <input type="checkbox"/> c. Dormant Cane (Broadcast Basal) <input checked="" type="checkbox"/> d. Soil Applications (Soil Sterilant) <input type="checkbox"/> e. Ground Broadcast Stem-Foliage <input type="checkbox"/> f. Stem Injection (Frill Treatment) <input type="checkbox"/> g. Other - Describe: _____ |



116 STATE STREET
DRAWER 20
MONTPELIER, VT 05620-2901

7. Railroad Right-of-Way Treatment

- a. Ballast
 b. Shoulder

B. Site Specific Information

1. List Towns where Treatment will be Made:
Montpelier, Barre City, Barre Town, S. Barre, Berlin

2. Total Acreage to be Treated Total Acres: 65
Ground Application Acres: 65
3. Width of Right-of-Way Feet: 10' - 100'
4. Width of Area In Right-of-Way to be Treated Feet: 24'
5. Anticipated Starting Date: 5/1/2022

C. Special Needs - Treatment Within Buffer Strips

1. Specific Areas where Application is to be made:
Spray a 24' foot pattern when applying 1st application formulations
Spray around signal cases, mast, mile post and whistle post for a distance of 20' preceding
and 20' proceeding
Spray wider than 24' between tracks in rail yards
Spray around stored materials.
Spray up to 2' of waters edge
Spray public road crossings and designated private crossings 300' prior to and complete
treatment 300' after each crossing for a lateral distance of 12' beyond the roadbed pattern
during the first application.
2. Type of Vegetation to be Controlled:
Weeds, Grasses and Broadleaves.
3. Pesticide(s) to be Applied (List Here and in Section E):
53.8% Glyphosate (Aquaneat) or (Roundup Custom)
4. Rate of Application (List Here and in Section E):
53.8% Glyphosate - 2 quarts per acre

5. Application Technique to be Implemented:

Spot Application

6. Application Equipment to be Used:

Highrail truck with nozzles fixed booms 18" above rail

7. Explain how this Request will Protect Sensitive Areas, Sensitive Crops, Site Conditions, Wells, etc.:

Sensitive areas identified in the field will be flagged prior to spraying.

D. Contractor Information

1. Contractor's Name: Brian Chateauvert
2. Company Name: RWC, Inc.
3. Company Address: PO Box 876, 248 Lockhouse Road
Westfield, MA 01086-0876
4. Current Vermont Applicator Certificate Number: 75-A
5. Company Telephone Number: (413) 562-5681

E. Control Details

Pesticides to be used and rates to be applied. If more than one chemical is listed, a summary of the uses intended for each chemical must be provided. The summary should state whether the chemical will be mixed or applied separately, specifying which chemicals will control what types of vegetation. (Please Note: A copy of a label, MSDS sheet and EPA Fact Sheet [if available] must be supplied for each chemical to be used.)

Trade Name	Common Name of Active Ingredient(s)	EPA Reg. Number	Applic. Rate Product/Acre	Vegetation to Be Controlled	Type of Application and Equipment to be Used
Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	1qt/acre 1qt/acre 1pt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail
Esplanade 200 SC	Indaziflam	432-1516	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
Method 240SL	Aminocyclopyrachlor	432-1565	8 ozs/acre	Weeds, Grass, Broadleaves	Aquaneat or Roundup Custom, Esplanade 200SC Oust Extra to be mixed in 30/40 gal. of water per acre
Oust Extra	Metsulfuron Methyl Sulfometuron Methyl	432-1557	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
* Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	2 qts/acre 2 qts/acre 1qt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Glyphosate to be mixed in 30/40 gallons

* Please Note: A drift control agent will be added to formulations to reduce the chance of drift to non-targeted areas and the post-emergent treatments, in addition to a drift control agent, will have an adjuvant/spreader sticker added to allow for better intake of the herbicide by the plant. Nufarm(Aquaneat) and Bayer (Roundup Custom) both contain 5.4 pounds per gallon glyphosate. Nufarm (Diquat SPC 2L) contains 3.73 pounds diquat dibromide per gallon

F. Methods of Notification

1. List the Newspapers in which you will Advertise this Application to Comply with Section IV, 4.b., of the Vermont Regulations for Control of Pesticides.

Barre - Montpelier Times Argus, Burlington Free Press

2. Please Indicate Other Notification Option Chosen to Comply with Section IV, 4.c, of the Vermont Regulations for Control of Pesticides.

Radio Messages

G. Other Information To Be Submitted With Application

1. Two (2) Sets of Geodetic (in 7.5 minute scale) or Orthophoto Maps indicating the Right-of-Way to be Treated. (Only one set of maps is needed if maps have been previously submitted and revisions have not been made.)
2. Current Labelling for each Pesticide previously submitted by RWC, Inc.
3. Current Material Safety Data Sheet previously submitted by RWC, Inc.
4. Current Environmental Protection Agency Pesticide Fact Sheet (if available).

The undersigned accepts full responsibility for all statutes and regulations of the State of Vermont and understands that any authorization is limited to the described materials, locations and time periods stated herein.

The undersigned further understands that weekly spray and dusting operations must be reported to the Vermont Department of Agriculture. Such written report shall be on forms furnished by the Commissioner of Agriculture and placed in the mail not later than the close of business on the Monday following the week's operation.

2-14-22

Date



Signature of Applicant

(NOTE: Additional Sheets may be attached to include further information.)



STATE OF VERMONT

Cary Giguere
Vermont Agency of Agriculture, Food & Markets
116 State Street
Montpelier, Vermont 05620
(802) 828-1410

REQUEST FOR PERMIT TO CONDUCT RIGHTS-OF-WAY SPRAYING

Request is hereby made, pursuant to Title 6 V.S.A., Chapter 87 and the regulations issued pursuant thereto, for an approved permit to conduct spraying on rights-of-way within the State of Vermont.

A. General Information

1. Title of Organization: Washington County Railroad Conn. River Div.
2. Address: 118 Post St
Rutland, VT 05701
3. Telephone Number: (802) 775-4356
4. Contact Person: R.T. Boucher

5. Type of Right-of-Way:

- a. Electric Power Transmission Line
- b. Electric Power Distribution Line
- c. Telephone Line
- d. Highway
- e. Pipeline (Specify: Gas, Soil, Water)
- f. Railroad
- g. Airport Approaches and Safety Zones
- h. Other - Describe

6. Type of Treatment

- a. Selective Basal
- b. Stump Treatment
- c. Dormant Cane (Broadcast Basal)
- d. Soil Applications (Soil Sterilant)
- e. Ground Broadcast Stem-Foliage
- f. Stem Injection (Frill Treatment)
- g. Other - Describe: _____



116 STATE STREET
DRAWER 20
MONTPELIER, VT 05620-2901

Request for Permit to Conduct Rights-of-Way Spraying
Page 2

7. Railroad Right-of-Way Treatment

- a. Ballast
 b. Shoulder

B. Site Specific Information

1. List Towns where Treatment will be Made:

White River, Hartford, Wilder, Norwich, Thetford, Fairlee, Bradford, Newbury
Wells River, Newport, Coventry, Orleans, Barton, Sutton, West Burke, Lyndonville
St. Johnsbury, Passumpsic, Barnet, Ryegate

2. Total Acreage to be Treated Total Acres: 450
- Ground Application Acres: 450
3. Width of Right-of-Way Feet: 25' - 160'
4. Width of Area In Right-of-Way to be Treated Feet: 24'
5. Anticipated Starting Date: 5/1/2022

C. Special Needs - Treatment Within Buffer Strips

1. Specific Areas where Application is to be Made:

Spray a 24' foot pattern when applying 1st application formulations
Spray around signal cases,mast,mile post and whistle post for a distance of 20' preceding
and 20' proceeding
Spray wider than 24' between tracks in rail yards
Spray around stored materials.
Spray up to 2' of waters edge
Spray public road crossings and designated private crossings 300' prior to and complete
treatment 300' after each crossing for a lateral distance of 12' beyond the roadbed pattern
during the first application.

2. Type of Vegetation to be Controlled:

Weeds, Grasses and Broadleaves.

3. Pesticide(s) to be Applied (List Here and in Section E):

53.8% Glyphosate (Aquaneat) or (Roundup Custom)

4. Rate of Application (List Here and in Section E):

53.8% Glyphosate - 2 quarts per acre

Request for Permit to Conduct Rights-of-Way Spraying
Page 3

5. Application Technique to be Implemented:

Spot Application

6. Application Equipment to be Used:

Highrail truck with nozzles fixed booms 18" above rail

7. Explain how this Request will Protect Sensitive Areas, Sensitive Crops, Site Conditions, Wells, etc.:

Sensitive areas identified in the field will be flagged prior to spraying.

D. Contractor Information

1. Contractor's Name: Brian Chateauvert
2. Company Name: RWC, Inc.
3. Company Address: PO Box 876, 248 Lockhouse Road
Westfield, MA 01086-0876
4. Current Vermont Applicator Certificate Number: 75-A
5. Company Telephone Number: (413) 562-5681

Request for Permit to Conduct Rights-of-Way Spraying

Page 4

E. Control Details

Pesticides to be used and rates to be applied. If more than one chemical is listed, a summary of the uses intended for each chemical must be provided. The summary should state whether the chemical will be mixed or applied separately, specifying which chemicals will control what types of vegetation. (Please Note: A copy of a label, MSDS sheet and EPA Fact Sheet [if available] must be supplied for each chemical to be used.)

Trade Name	Common Name of Active Ingredient(s)	EPA Reg. Number	Applie. Rate Product/Acre	Vegetation to Be Controlled	Type of Application and Equipment to be Used
Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	1qt/acre 1qt/acre 1pt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail Hyrail truck with fixed boom 18" above rail
Esplanade 200 SC	Indaziflam	432-1516	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
Method 240SL	Aminocyclopyrachlor	432-1565	8 ozs/acre	Weeds, Grass, Broadleaves	Aquaneat or Roundup Custom, Esplanade 200SC Oust Extra to be mixed in 30/40 gal. of water per acre
Oust Extra	Metsulfuron Methyl Sulfometuron Methyl	432-1557	4 ozs/acre	Weeds, Grass, Broadleaves	Same as above
*Aquaneat or Roundup Custom or Diquat SPC 2L	53.8% Glyphosate 53.8% Glyphosate Diquat dibromide	228-365 524-343 228-675	2 qts/acre 2 qts/acre 1qt/acre	Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves Weeds, Grass, Broadleaves	Hyrail truck with fixed boom 18" above rail Glyphosate to be mixed in 30/40 gallons

* Please Note: A drift control agent will be added to formulations to reduce the chance of drift to non-targeted areas and the post-emergent treatments, in addition to a drift control agent, will have an adjuvant/spreader sticker added to allow for better intake of the herbicide by the plant. Nufarm(Aquaneat) and Bayer (Roundup Custom) both contain 5.4 pounds per gallon glyphosate. Nufarm (Diquat SPC 2L) contains 3.73 pounds diquat dibromide per gallon

F. Methods of Notification

1. List the Newspapers in which you will Advertise this Application to Comply with Section IV, 4.b., of the Vermont Regulations for Control of Pesticides.

Barre - Montpelier Times Argus, Claremont Eagle,

Caledonia Record, Hardwick Gazette, Newport Daily Express

2. Please Indicate Other Notification Option Chosen to Comply with Section IV, 4.c, of the Vermont Regulations for Control of Pesticides.

Radio Messages

G. Other Information To Be Submitted With Application

1. Two (2) Sets of Geodetic (in 7.5 minute scale) or Orthophoto Maps indicating the Right-of-Way to be Treated. (Only one set of maps is needed if maps have been previously submitted and revisions have not been made.)
2. Current Labelling for each Pesticide previously submitted by RWC, Inc.*
3. Current Material Safety Data Sheet previously submitted by RWC, Inc.
4. Current Environmental Protection Agency Pesticide Fact Sheet (if available).

The undersigned accepts full responsibility for all statutes and regulations of the State of Vermont and understands that any authorization is limited to the described materials, locations and time periods stated herein.

The undersigned further understands that weekly spray and dusting operations must be reported to the Vermont Department of Agriculture. Such written report shall be on forms furnished by the Commissioner of Agriculture and placed in the mail not later than the close of business on the Monday following the week's operation.

2-14-22

Date



Signature of Applicant

(NOTE: Additional Sheets may be attached to include further information.)

Office of the Secretary, Anson B. Tebbets

www.agriculture.vermont.gov

116 State Street • Montpelier, Vermont 05620-2901 • (802) 828-5667 • (802) 828-1410 fax

Permittee: Vermont Railway, Inc. 118 Post Street Rutland, Vermont 05701 (802)775-4356
[Contact Person: R.T. Boucher]

Permit conditions:

1. The permittee shall contact the Agency one (1) day prior to initiating this permit.
2. The permittee shall coordinate one (1) use inspection with the Agency.
3. This permit authorizes the use of pesticides in the railroad ballast during this calendar year in the towns of Burlington, South Burlington, Shelburne, Charlotte, Vergennes, Ferrisburgh, New Haven, Middlebury, Salisbury, Leicester, Brandon, Pittsford, Rutland Town, Rutland City, Clarendon, Wallingford, Danby, Dorset, Manchester, Sunderland, Arlington, Shaftsbury, Bennington and Mount Tabor. This permit does not allow for treatment to control terrestrial invasive plant species, if not required to meet the safety and public health needs. This permit in no way authorizes the applicant to use pesticides on real estate where it has no lawful right to do so.
4. Ballast maintenance activities are prohibited for thirty (30) days or until one (1) inch of rain has fallen following application, unless the application is a glyphosate-only application. Ballast maintenance activities are prohibited for five (5) days after a glyphosate-only application.
5. All distances described in this permit are horizontal (lateral) measurements.
6. The spray width shall be no greater than twelve (12) feet from either side of the centerline of the tracks or no greater than the width of the ballast, or as specified below.

Where safe, practical, **and** consistent with other buffers and conditions required by this permit:

- a. The spray width at public and designated private *road crossings* will extend twenty-four (24) feet from centerline on either side for 300 feet preceding and 300 feet proceeding the crossing.
 - b. The spray width for *whistle posts* shall be no greater than twelve (12) feet from centerline on the opposite side of the rail from the whistle post. The spray width may extend out to a maximum width of twenty-four (24) feet on the side of the whistle post. This extended width may begin no farther than twenty (20) feet preceding the whistle post and end no later than twenty (20) feet following the whistle post.
 - c. The spray width for *mile posts* shall be no greater than twenty-four (24) feet from centerline. Applications of up to this twenty-four (24) feet width may begin up to no farther than twenty (20) feet preceding the mile post and end no later than twenty (20) feet following the mile post.
 - d. Applications around signal cases and masts, stored material and railroad yard applications must be in accordance with the product label.
7. At least one certified applicator shall be a member of each application crew. All label recommendations and requirements for protective clothing shall be adhered to for all applicators.

8. Proof of public notification as detailed in the permit application shall be provided to the Agency as proof that the notification occurred (e.g., copies of newspaper tear sheets, invoices).
9. Pesticides shall not enter the waters of the State. Buffers to water are:
 - a. Applications made **parallel** to surface water shall have a visible limit of ten (10) feet from the edge of the water when spraying glyphosate-only products, or a visible distance of fifteen (15) feet when spraying any other permitted products or mixture thereof.
 - i. In areas where the parallel water's edge is less than ten (10) feet, but farther than two (2) feet from the shoulder, only aquatically labeled glyphosate-only applications may be within the railroad tie (tie end-to-tie end).
 - b. Applications made at a surface water **crossing** shall have a visible limit of thirty (30) feet from the water's edge.
 - c. Aquatically-labeled glyphosate products may be applied up to two (2) feet from the edge of water crossings, bridge abutments or culverts containing water, by hy-rail application equipment traveling at two (2) miles per hour.
10. Public and private water supplies are to be avoided.
 - a. Applications shall not be made within 200 feet of a public drinking water source. For sources supplied by surface water the buffer shall be measured from the shoreline. Surface waters in a source protection area that contribute to the source shall have a buffer of 100 feet.
 - b. Applications shall not be made within 100 feet of private drinking water source; as identified by the Vermont ANR Atlas, through well owner notification to the permittee, or identified in the field.
11. A copy of this permit and current maps identifying both public and private water supplies shall be provided to the applicator for use during application.
12. Spray reports shall be submitted by the pesticide applicator to the Agency of Agriculture on a weekly basis.

Records may be mailed to:

VAAFM – Public Health Agricultural Resource Management Division
116 State Street, Montpelier, Vermont 05620

Alternatively, they may be submitted electronically to:
Morgan.Griffith@vermont.gov

13. The following pesticides may be applied at the rates listed below and in accordance with the label:

Product name	EPA registration number	Rate not to exceed
Aquaneat	228-365	1 qt/acre if tank mixed (2 qt/acre if only product)
or Roundup Custom	524-343	1 qt/acre if tank mixed (2 qt/acre if only product)
or Diquat SPC 2L	228-675	1 qt/acre
Esplanade 200 SC	432-1516	4.0 oz/acre

Method 240SL	432-1565	8.0 oz/acre
Oust Extra	432-1557	4.0 oz/acre

14. Applications between Maple and College Streets in Burlington shall be made under the following conditions:
- a. Application shall not occur on a weekend or holiday;
 - b. Application shall be made during prior to 6:00 a.m.; and
 - c. The permittee shall notify the Agency twenty-four (24) hours prior to application being made.
15. In the event the permittee sub-contracts or assigns any of the applications authorized by this permit, the permittee shall continue to remain responsible for the conditions of this permit. This condition does not relieve any sub-contractor or assignee from compliance.
16. All operations shall be conducted in accordance with the representations made by the permittee in its permit application under these permit conditions unless, and until, the permit is amended.
17. Applications in rail yards are to be conducted at times of low pedestrian traffic to limit human exposure.
18. The Secretary reserves the right to further limit or restrict the application of pesticides approved under this permit as conditions or circumstances warrant.

This permit was published for public comment and forwarded with recommendation to the Secretary.

Dated TBD, 2022

Anson B. Tebbetts, Secretary
Agency of Agriculture, Food & Markets

Office of the Secretary, Anson B. Tebbetts

www.agriculture.vermont.gov

116 State Street • Montpelier, Vermont 05620-2901 • (802) 828-5667 • (802) 828-1410 fax

Permittee: Clarendon & Pittsford Railroad, 118 Post Road Rutland, Vermont 05701 (802)755-4356
[Contact Person: R.T. Boucher]

Permit conditions:

1. The permittee shall contact the Agency one (1) day prior to initiating this permit.
2. The permittee shall coordinate one (1) use inspection with the Agency.
3. This permit authorizes the use of pesticides in the railroad ballast this calendar year in the towns of Fair Haven, Castleton, Ira, West Rutland, Rutland Town and Pittsford. This permit does not allow for treatment to control terrestrial invasive plant species, if not required to meet the safety and public health needs. This permit in no way authorizes the applicant to use pesticides on real estate where it has no lawful right to do so.
4. Ballast maintenance activities are prohibited for thirty (30) days or until one (1) inch of rain has fallen following application, unless the application is a glyphosate-only application. Ballast maintenance activities are prohibited for five (5) days after a glyphosate-only application.
5. All distances described in this permit are horizontal (lateral) measurements.
6. The spray width shall be no greater than twelve (12) feet from either side of the centerline of the tracks or no greater than the width of the ballast, or as specified below.

Where safe, practical, **and** consistent with other buffers and conditions required by this permit:

- a. The spray width at public and designated private *road crossings* will extend twenty-four (24) feet from centerline on either side for 300 feet preceding and 300 feet proceeding the crossing.
 - b. The spray width for *whistle posts* shall be no greater than twelve (12) feet from centerline on the opposite side of the rail from the whistle post. The spray width may extend out to a maximum width of twenty-four (24) feet on the side of the whistle post. This extended width may begin no farther than twenty (20) feet preceding the whistle post and end no later than twenty (20) feet following the whistle post.
 - c. The spray width for *mile posts* shall be no greater than twenty-four (24) feet from centerline. Applications of up to this twenty-four (24) feet width may begin up to no farther than twenty (20) feet preceding the mile post and end no later than twenty (20) feet following the mile post.
 - d. Applications around signal cases and masts, stored material and railroad yard applications must be in accordance with the product label.
7. At least one certified applicator shall be a member of each application crew. All label recommendations and requirements for protective clothing shall be adhered to for all applicators.
 8. Proof of public notification as detailed in the permit application shall be provided to the Agency as proof that the notification occurred (e.g., copies of newspaper tear sheets, invoices).

9. Pesticides shall not enter the waters of the State. Buffers to water are:

- a. Applications made **parallel** to surface water shall have a visible limit of ten (10) feet from the edge of the water when spraying glyphosate-only products, or a visible distance of fifteen (15) feet when spraying any other permitted products or mixture thereof.
 - i. In areas where the parallel water's edge is less than ten (10) feet, but farther than two (2) feet from the shoulder, only aquatically labeled glyphosate-only applications may be within the railroad tie (tie end-to-tie end).
- b. Applications made at a surface water **crossing** shall have a visible limit of thirty (30) feet from the water's edge.
- c. Aquatically-labeled glyphosate products may be applied up to two (2) feet from the edge of water crossings, bridge abutments or culverts containing water, by hy-rail application equipment traveling at two (2) miles per hour.

10. Public and private water supplies are to be avoided.

- a. Applications shall not be made within 200 feet of a public drinking water source. For sources supplied by surface water the buffer shall be measured from the shoreline. Surface waters in a source protection area that contribute to the source shall have a buffer of 100 feet.
- b. Applications shall not be made within 100 feet of private drinking water source; as identified by the Vermont ANR Atlas, through well owner notification to the permittee, or identified in the field.

11. A copy of this permit and current maps identifying both public and private water supplies shall be provided to the applicator for use during application.

12. Spray reports shall be submitted by the pesticide applicator to the Agency of Agriculture on a weekly basis.

Records may be mailed to:

VAAFM – Public Health Agricultural Resource Management Division
116 State Street, Montpelier, VT 05620

Alternatively, they may be submitted electronically to:
Morgan.Griffith@vermont.gov

13. The following pesticides may be applied at the rates listed below and in accordance with the label:

Product name	EPA registration number	Rate not to exceed
Aquaneat	228-365	1 qt/acre if tank mixed (2 qt/acre if only product)
or Roundup Custom	524-343	1 qt/acre if tank mixed (2 qt/acre if only product)
or Diquat SPC 2L	228-675	1 qt/acre
Esplanade 200 SC	432-1516	4.0 oz/acre

Method 240SL	432-1565	8.0 oz/acre
Oust Extra	432-1557	4.0 oz/acre

14. In the event the permittee sub-contracts or assigns any of the applications authorized by this permit, the permittee shall continue to remain responsible for the conditions of this permit. This condition does not relieve any sub-contractor or assignee from compliance.
15. All operations shall be conducted in accordance with the representations made by the permittee in its permit application under these permit conditions unless, and until, the permit is amended.
16. Applications in rail yards are to be conducted at times of low pedestrian traffic to limit human exposure.
17. The Secretary reserves the right to further limit or restrict the application of pesticides approved under this permit as conditions or circumstances warrant.

This permit was published for public comment and forwarded with recommendation to the Secretary.

Dated TBD, 2022

Anson B. Tebbetts, Secretary
Agency of Agriculture, Food & Markets

Office of the Secretary, Anson B. Tebbetts

www.agriculture.vermont.gov

116 State Street • Montpelier, Vermont 05620-2901 • (802) 828-5667 • (802) 828-1410 fax

Permittee: Green Mountain Railroad 118 Post Street Rutland, Vermont 05701 (802)775-4356
[Contact Person: R.T. Boucher]

Permit conditions:

1. The permittee shall contact the Agency one (1) day prior to initiating this permit.
2. The permittee shall coordinate one (1) use inspection with the Agency.
3. This permit authorizes the use of pesticides in the railroad ballast this calendar year in the towns of Rockingham (Bellows Falls) Chester, Cavendish, Ludlow, Mount Holly, East Wallingford, Shrewsbury, Rutland Town and Rutland City. This permit does not allow for treatment to control terrestrial invasive plant species, if not required to meet the safety and public health needs. This permit in no way authorizes the applicant to use pesticides on real estate where it has no lawful right to do so.
4. Ballast maintenance activities are prohibited for thirty (30) days or until one (1) inch of rain has fallen following application, unless the application is a glyphosate-only application. Ballast maintenance activities are prohibited for five (5) days after a glyphosate-only application.
5. All distances described in this permit are horizontal (lateral) measurements.
6. The spray width shall be no greater than twelve (12) feet from either side of the centerline of the tracks or no greater than the width of the ballast, or as specified below.

Where safe, practical, **and** consistent with other buffers and conditions required by this permit:

- a. The spray width at public and designated private *road crossings* will extend twenty-four (24) feet from centerline on either side for 300 feet preceding and 300 feet proceeding the crossing.
 - b. The spray width for *whistle posts* shall be no greater than twelve (12) feet from centerline on the opposite side of the rail from the whistle post. The spray width may extend out to a maximum width of twenty-four (24) feet on the side of the whistle post. This extended width may begin no farther than twenty (20) feet preceding the whistle post and end no later than twenty (20) feet following the whistle post.
 - c. The spray width for *mile posts* shall be no greater than twenty-four (24) feet from centerline. Applications of up to this twenty-four (24) feet width may begin up to no farther than twenty (20) feet preceding the mile post and end no later than twenty (20) feet following the mile post.
 - d. Applications around signal cases and masts, stored material and railroad yard applications must be in accordance with the product label.
7. At least one certified applicator shall be a member of each application crew. All label recommendations and requirements for protective clothing shall be adhered to for all applicators.
 8. Proof of public notification as detailed in the permit application shall be provided to the Agency as proof that the notification occurred (e.g., copies of newspaper tear sheets, invoices).

9. Pesticides shall not enter the waters of the State. Buffers to water are:

- a. Applications made **parallel** to surface water shall have a visible limit of ten (10) feet from the edge of the water when spraying glyphosate-only products, or a visible distance of fifteen (15) feet when spraying any other permitted products or mixture thereof.
 - i. In areas where the parallel water's edge is less than ten (10) feet, but farther than two (2) feet from the shoulder, only aquatically labeled glyphosate-only applications may be within the railroad tie (tie end-to-tie end).
- b. Applications made at a surface water **crossing** shall have a visible limit of thirty (30) feet from the water's edge.
- c. Aquatically-labeled glyphosate products may be applied up to two (2) feet from the edge of water crossings, bridge abutments or culverts containing water, by hy-rail application equipment traveling at two (2) miles per hour.

10. Public and private water supplies are to be avoided.

- a. Applications shall not be made within 200 feet of a public drinking water source. For sources supplied by surface water the buffer shall be measured from the shoreline. Surface waters in a source protection area that contribute to the source shall have a buffer of 100 feet.
- b. Applications shall not be made within 100 feet of private drinking water source; as identified by the Vermont ANR Atlas, through well owner notification to the permittee, or identified in the field.

11. A copy of this permit and current maps identifying both public and private water supplies shall be provided to the applicator for use during application.

12. Spray reports shall be submitted by the pesticide applicator to the Agency of Agriculture on a weekly basis.

Records may be mailed to:

VAAFM – Public Health Agricultural Resource Management Division
116 State Street, Montpelier, VT 05620

Alternatively, they may be submitted electronically to:

Morgan.Griffith@vermont.gov

13. The following pesticides may be applied at the rates listed below and in accordance with the label:

Product name	EPA registration number	Rate not to exceed
Aquaneat	228-365	1 qt/acre if tank mixed (2 qt/acre if only product)
or Roundup Custom	524-343	1 qt/acre if tank mixed (2 qt/acre if only product)
or Diquat SPC 2L	228-675	1 qt/acre
Esplanade 200 SC	432-1516	4.0 oz/acre
Method 240SL	432-1565	8.0 oz/acre

Oust Extra	432-1557	4.0 oz/acre
------------	----------	-------------

14. In the event the permittee sub-contracts or assigns any of the applications authorized by this permit, the permittee shall continue to remain responsible for the conditions of this permit. This condition does not relieve any sub-contractor or assignee from compliance.
15. All operations shall be conducted in accordance with the representations made by the permittee in its permit application under these permit conditions unless, and until, the permit is amended.
16. Applications in rail yards are to be conducted at times of low pedestrian traffic to limit human exposure.
17. The Secretary reserves the right to further limit or restrict the application of pesticides approved under this permit as conditions or circumstances warrant.

This permit was published for public comment and forwarded with recommendation to the Secretary.

Dated TBD, 2022

Anson B. Tebbetts, Secretary
Agency of Agriculture, Food & Markets

Office of the Secretary, Anson B. Tebbetts

www.agriculture.vermont.gov

116 State Street • Montpelier, Vermont 05620-2901 • (802) 828-5667 • (802) 828-1410 fax

Permittee: Washington County Railroad (Barre), 118 Post Street Rutland, Vermont 05701 (802)775-4356
[Contact Person: R.T. Boucher]

Permit conditions:

1. The permittee shall contact the Agency one (1) day prior to initiating this permit.
2. The permittee shall coordinate one (1) use inspection with the Agency.
3. This permit authorizes the use of pesticides in the railroad ballast this calendar year in the towns of Montpelier, Barre City, Barre Town, South Barre and Berlin. This permit does not allow for treatment to control terrestrial invasive plant species, if not required to meet the safety and public health needs. This permit in no way authorizes the applicant to use pesticides on real estate where it has no lawful right to do so.
4. Ballast maintenance activities are prohibited for thirty (30) days or until one (1) inch of rain has fallen following application, unless the application is a glyphosate-only application. Ballast maintenance activities are prohibited for five (5) days after a glyphosate-only application.
5. All distances described in this permit are horizontal (lateral) measurements.
6. The spray width shall be no greater than twelve (12) feet from either side of the centerline of the tracks or no greater than the width of the ballast, or as specified below.

Where safe, practical, **and** consistent with other buffers and conditions required by this permit:

- a. The spray width at public and designated private *road crossings* will extend twenty-four (24) feet from centerline on either side for 300 feet preceding and 300 feet proceeding the crossing.
 - b. The spray width for *whistle posts* shall be no greater than twelve (12) feet from centerline on the opposite side of the rail from the whistle post. The spray width may extend out to a maximum width of twenty-four (24) feet on the side of the whistle post. This extended width may begin no farther than twenty (20) feet preceding the whistle post and end no later than twenty (20) feet following the whistle post.
 - c. The spray width for *mile posts* shall be no greater than twenty-four (24) feet from centerline. Applications of up to this twenty-four (24) feet width may begin up to no farther than twenty (20) feet preceding the mile post and end no later than twenty (20) feet following the mile post.
 - d. Applications around signal cases and masts, stored material and railroad yard applications must be in accordance with the product label.
7. Treatment in high-traffic/urban areas of Montpelier shall only occur prior to 6:00 a.m. The permittee shall notify the Agency twenty-four (24) hours prior to this application being made.
 8. At least one certified applicator shall be a member of each application crew. All label recommendations and requirements for protective clothing shall be adhered to for all applicators.
 9. Proof of public notification as detailed in the permit application shall be provided to the Agency as proof that the notification occurred (e.g., copies of newspaper tear sheets, invoices).

10. Pesticides shall not enter the waters of the State. Buffers to water are:

- a. Applications made **parallel** to surface water shall have a visible limit of ten (10) feet from the edge of the water when spraying glyphosate-only products, or a visible distance of fifteen (15) feet when spraying any other permitted products or mixture thereof.
 - i. In areas where the parallel water's edge is less than ten (10) feet, but farther than two (2) feet from the shoulder, only aquatically labeled glyphosate-only applications may be within the railroad tie (tie end-to-tie end).
- b. Applications made at a surface water **crossing** shall have a visible limit of thirty (30) feet from the water's edge.
- c. Aquatically-labeled glyphosate products may be applied up to two (2) feet from the edge of water crossings, bridge abutments or culverts containing water, by hy-rail application equipment traveling at two (2) miles per hour.

11. Public and private water supplies are to be avoided.

- a. Applications shall not be made within 200 feet of a public drinking water source. For sources supplied by surface water the buffer shall be measured from the shoreline. Surface waters in a source protection area that contribute to the source shall have a buffer of 100 feet.
- b. Applications shall not be made within 100 feet of private drinking water source; as identified by the Vermont ANR Atlas, through well owner notification to the permittee, or identified in the field.

12. A copy of this permit and current maps identifying both public and private water supplies shall be provided to the applicator for use during application.

13. Spray reports shall be submitted by the pesticide applicator to the Agency of Agriculture on a weekly basis.

Records may be mailed to:

VAAFM – Public Health Agricultural Resource Management Division
116 State Street, Montpelier, VT 05620

Alternatively, they may be submitted electronically to:

Morgan.Griffith@vermont.gov

14. The following pesticides may be applied at the rates listed below and in accordance with the label:

Product name	EPA registration number	Rate not to exceed
Aquaneat or Roundup Custom or Diquat SPC 2L	228-365 524-343 228-675	1 qt/acre if tank mixed (2 qt/acre if only product) 1 qt/acre if tank mixed (2 qt/acre if only product) 1 qt/acre
Esplanade 200 SC	432-1516	4.0 oz/acre
Method 240SL	432-1565	8.0 oz/acre
Oust Extra	432-1557	4.0 oz/acre

15. In the event the permittee sub-contracts or assigns any of the applications authorized by this permit, the permittee shall continue to remain responsible for the conditions of this permit. This condition does not relieve any sub-contractor or assignee from compliance.
16. All operations shall be conducted in accordance with the representations made by the permittee in its permit application under these permit conditions unless, and until, the permit is amended.
17. Applications in rail yards are to be conducted at times of low pedestrian traffic to limit human exposure.
18. The Secretary reserves the right to further limit or restrict the application of pesticides approved under this permit as conditions or circumstances warrant.

This permit was published for public comment and forwarded with recommendation to the Secretary.

Dated TBD, 2022

Anson B. Tebbetts, Secretary
Agency of Agriculture, Food & Markets

Office of the Secretary, Anson B. Tebbetts

www.agriculture.vermont.gov

116 State Street • Montpelier, Vermont 05620-2901 • (802) 828-5667 • (802) 828-1410 fax

Permittee: Washington County Railroad-Connecticut River Division; 118 Post Street, Rutland, Vermont 05701
(802)775-4356 [Contact Person: R.T. Boucher]

Permit conditions:

1. The permittee shall contact the Agency one (1) day prior to initiating this permit.
2. The permittee shall coordinate one (1) use inspection with the Agency.
3. This permit authorizes the use of pesticides in the railroad ballast during the calendar year in the towns of White River, Hartford, Wilder, Norwich, Thetford, Fairlee, Bradford, Newbury, Wells River, Newport, Coventry, Orleans, Barton, Sutton, West Burke, Lyndonville, St. Johnsbury, Passumpsic, Barnet and Ryegate. This permit does not allow for treatment to control terrestrial invasive plant species, if not required to meet the safety and public health needs. This permit in no way authorizes the applicant to use pesticides on real estate where it has no lawful right to do so.
4. Ballast maintenance activities are prohibited for thirty (30) days or until one (1) inch of rain has fallen following application, unless the application is a glyphosate-only application. Ballast maintenance activities are prohibited for five (5) days after a glyphosate-only application.
5. All distances described in this permit are horizontal (lateral) measurements.
6. The spray width shall be no greater than twelve (12) feet from either side of the centerline of the tracks or no greater than the width of the ballast, or as specified below.

Where safe, practical, **and** consistent with other buffers and conditions required by this permit:

- a. The spray width at public and designated private *road crossings* will extend twenty-four (24) feet from centerline on either side for 300 feet preceding and 300 feet proceeding the crossing.
 - b. The spray width for *whistle posts* shall be no greater than twelve (12) feet from centerline on the opposite side of the rail from the whistle post. The spray width may extend out to a maximum width of twenty-four (24) feet on the side of the whistle post. This extended width may begin no farther than twenty (20) feet preceding the whistle post and end no later than twenty (20) feet following the whistle post.
 - c. The spray width for *mile posts* shall be no greater than twenty-four (24) feet from centerline. Applications of up to this twenty-four (24) feet width may begin up to no farther than twenty (20) feet preceding the mile post and end no later than twenty (20) feet following the mile post.
 - d. Applications around signal cases and masts, stored material and railroad yard applications must be in accordance with the product label.
7. At least one certified applicator shall be a member of each application crew. All label recommendations and requirements for protective clothing shall be adhered to for all applicators.
 8. Proof of public notification as detailed in the permit application shall be provided to the Agency as proof that the notification occurred (e.g., copies of newspaper tear sheets, invoices).

9. Pesticides shall not enter the waters of the State. Buffers to water are:

- a. Applications made **parallel** to surface water shall have a visible limit of ten (10) feet from the edge of the water when spraying glyphosate-only products, or a visible distance of fifteen (15) feet when spraying any other permitted products or mixture thereof.
 - i. In areas where the parallel water's edge is less than ten (10) feet, but farther than two (2) feet from the shoulder, only aquatically labeled glyphosate-only applications may be within the railroad tie (tie end-to-tie end).
- b. Applications made at a surface water **crossing** shall have a visible limit of 30 feet from the water's edge.
- c. Aquatically-labeled glyphosate products may be applied up to two (2) feet from the edge of water crossings, bridge abutments or culverts containing water, by hy-rail application equipment traveling at two (2) miles per hour.

10. Public and private water supplies are to be avoided.

- a. Applications shall not be made within 200 feet of a public drinking water source. For sources supplied by surface water the buffer shall be measured from the shoreline. Surface waters in a source protection area that contribute to the source shall have a buffer of 100 feet.
 - i. A buffer of 500 feet shall be provided to the Barnet Fire District #2 well.
- b. Applications shall not be made within 100 feet of private drinking water source; as identified by the Vermont ANR Atlas, through well owner notification to the permittee, or identified in the field.

11. A copy of this permit and current maps identifying both public and private water supplies shall be provided to the applicator for use during application.

12. Spray reports shall be submitted by the pesticide applicator to the Agency of Agriculture on a weekly basis.

Records may be mailed to:

VAAFM – Public Health Agricultural Resource Management Division
116 State Street, Montpelier, VT 05620

Alternatively, they may be submitted electronically to:
Morgan.Griffith@vermont.gov

13. The following pesticides may be applied at the rates listed below and in accordance with the label:

Product name	EPA registration number	Rate not to exceed
Aquaneat	228-365	1 qt/acre if tank mixed (2 qt/acre if only product)
or Roundup Custom	524-343	1 qt/acre if tank mixed (2 qt/acre if only product)
or Diquat SPC 2L	228-675	1 qt/acre
Esplanade 200 SC	432-1516	4.0 oz/acre

Method 240SL	432-1565	8.0 oz/acre
Oust Extra	432-1557	4.0 oz/acre

14. In the event the permittee sub-contracts or assigns any of the applications authorized by this permit, the permittee shall continue to remain responsible for the conditions of this permit. This condition does not relieve any sub-contractor or assignee from compliance.
15. All operations shall be conducted in accordance with the representations made by the permittee in its permit application under these permit conditions unless, and until, the permit is amended.
16. Applications in rail yards are to be conducted at times of low pedestrian traffic to limit human exposure.
17. The Secretary reserves the right to further limit or restrict the application of pesticides approved under this permit as conditions or circumstances warrant.

This permit was published for public comment and forwarded with recommendation to the Secretary.

Dated TBD, 2022

Anson B. Tebbetts, Secretary
Agency of Agriculture, Food & Markets

GROUP 9 HERBICIDE



AquaNeat®

Aquatic Herbicide

FOR USE ON EMERGED AQUATIC WEEDS AND BRUSH IN AQUATIC SITES. FOR USE IN FORESTRY (INCLUDING WEED CONTROL IN CHRISTMAS TREE PLANTATIONS), PASTURES, RANGELANDS, RIGHTS-OF-WAY, HABITAT RESTORATION AREAS, NON-CROP AND OTHER LISTED APPLICATION SITES.

ACTIVE INGREDIENT:

Glyphosate, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt* 53.8%

OTHER INGREDIENTS:

46.2%

TOTAL:

100.0%

*Contains 648 grams per litre or 5.4 pounds per U.S. gallon of the active ingredient, glyphosate, in the form of its isopropylamine salt. Equivalent to 480 grams per litre or 4 pounds per U.S. gallon of the acid, glyphosate.

KEEP OUT OF REACH OF CHILDREN
CAUTION / PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

(If you do not understand the label, find someone to explain it to you in detail.)

SEE INSIDE BOOKLET FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 228-365

EPA Est. No. 228-IL-001

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

For Medical Emergencies Only, Call (877) 325-1840

Manufactured for
Nufarm Americas Inc.
11901 S. Austin Avenue
Alsip, IL 60803



Grow a better tomorrow.



7 36211 76276 4

Net Contents
2.5 Gal.
(9.46 L)
Nonrefillable Container

14501000 [3]



PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION / PRECAUCION

Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

FIRST AID

IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
-------------------	---

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear long-sleeved shirt and long pants and shoes plus socks. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exists, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

For aquatic uses, do not contaminate water when disposing of equipment washwaters. Treatment of aquatic weeds can result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss can cause fish suffocation.

For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

In case of, SPILL OR LEAK, soak up and remove to a landfill. Do not contaminate water when disposing of equipment washwaters or rinsate.

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product must be mixed, stored and applied using only stainless steel, aluminum, fiberglass, plastic and plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Read the entire label before using this product. Use strictly in accordance with label precautionary statements and directions.





AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protection equipment (PPE) and Restricted-Entry Interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the Restricted-Entry Interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, shoes plus socks, and waterproof gloves.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Keep people and pets off treated areas until spray solution has dried.

PRODUCT INFORMATION

DO NOT APPLY THIS PRODUCT USING AERIAL SPRAY EQUIPMENT EXCEPT UNDER CONDITIONS AS SPECIFIED WITHIN THIS LABEL OR CURRENT SUPPLEMENTAL LABELING ISSUED BY MANUFACTURER.

This product, a water-soluble liquid, mixes readily with water and nonionic surfactant to be applied as a foliar spray after dilution and thoroughly mixing with water in accordance with label instructions for the control or destruction of many herbaceous and woody plants.

Always use the higher rate of this product per acre within the specified range when vegetation is heavy or dense, when treating dense multi-canopied sites, or woody vegetation or difficult-to-control herbaceous or woody plants.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on most annual weeds occur within 2 to 4 days but on most perennial brush species may not occur for 7 days or more. Extremely cool or cloudy weather following treatment may slow the activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above-ground growth and deterioration of underground plant parts.

Unless otherwise directed on this label, delay application until vegetation has emerged and reached the stages described for control of such vegetation under the "WEEDS CONTROLLED" section of this label.

Unemerged plants arising from unattached underground rhizomes or root stocks of perennials or brush will not be affected by the spray and will continue to grow. For this reason best control of most perennial weeds or brush is obtained when treatment is made at late growth stages approaching maturity.

Do not treat weeds or brush under poor growing conditions such as drought stress, disease or insect damage, as reduced control may result. Reduced results may also occur when treating weeds or brush heavily covered with dust.

Reduced control may result when applications are made to any weed or brush species that have been mowed, grazed or cut, and have not been allowed to regrow to the recommended stage for treatment.

Rainfall or irrigation occurring within 6 hours after application may reduce effectiveness. Heavy rainfall or irrigation within 2 hours after application may wash the product off the foliage and a repeat treatment may be required.

Mixing this product with herbicides or other materials not instructed in this label may result in reduced performance. However, unless otherwise prohibited on this label or the label of an intended tank mix product may be applied in combination with any herbicide registered for the same site, timing, and method of application. Observe the most restrictive label statements of various tank mix products used.

TO THE FULLEST EXTENT PERMITTED BY LAW, BUYER AND ALL USERS ARE RESPONSIBLE FOR ALL LOSS OR DAMAGE IN CONNECTION WITH THE USE OR HANDLING OF MIXTURES OF THIS PRODUCT OR OTHER MATERIALS THAT ARE NOT EXPRESSLY SPECIFIED IN THIS LABEL.

For best results, spray coverage must be uniform and complete. Do not spray weed foliage to the point of runoff.

When this product comes in contact with soil (on the soil surface or as suspended soil or sediment in water) it is bound to soil particles. Under labeled use situations, once this product is bound to soil particles, it is not available for plant uptake and will not harm off-site vegetation where roots grow into the treatment area or if the soil is transported off-site. Under labeled use conditions, the strong affinity of this product to soil particles prevents this product from leaching out of the soil profile and entering ground water. The affinity between this product and soil particles remains until this product is degraded, which is primarily a biological degradation process carried out under both aerobic and anaerobic conditions by soil micro flora.

This product does not provide residual weed control. For subsequent residual weed control, follow a label-approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used. Read "**WARRANTY DISCLAIMER**" and "**LIMITATION OF LIABILITY**" before buying or using. If items are not acceptable, return at once unopened. Buyer and all users are responsible for all loss or damage in connection with the use of handling of mixtures of this product or other materials that are not expressly specified in this label.

For more product information, call toll-free 1-800-345-3330.





ATTENTION

AVOID CONTACT WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS, OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT. AVOID DRIFT. EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS.

Do not allow the herbicide solution to mist, drip, drift or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants or other areas on which treatment was not intended. The likelihood of plant or crop injury occurring from the use of this product is greatest when winds are gusty or in excess of 5 miles per hour or when other conditions, including lesser wind velocities, will allow spray drift to occur. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. AVOID APPLYING AT EXCESSIVE SPEED OR PRESSURE.

NOTE: Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. When not in use, keep container closed to prevent spills and contamination.

WEED RESISTANCE

Any weed population may contain plants that are naturally resistant to glyphosate, the active ingredient in this product, and to other herbicides with the same mode of action. ATTENTION: These resistant weed biotypes will not be controlled by this product. Consult advisors such as your local agricultural extension service for agronomic management practices to minimize the occurrence of glyphosate resistance and considerations for supplemental control measures.

Weed Management

To minimize the occurrence of glyphosate-resistant biotypes, observe the following general weed management practices:

- Scout application site before and after herbicide applications.
- Start with a clean application site, using either a burndown herbicide application or tillage.
- Control weeds early when they are relatively small.
- Add other herbicides (e.g. a selective and/or a residual herbicide) and cultural practices (e.g. tillage or crop rotation) where appropriate.
- Utilize the specified label rate for the most difficult to control weed in your field. Avoid tank mixtures with other herbicides that reduce this product's efficacy (through antagonism), or tank mixture directions that encourage application rates of this product below the label directions.
- Control weed escapes and prevent weeds from setting seeds.
- Clean equipment before moving from field to field to minimize the spread of weed seed or plant parts.
- Report any incidence of repeated non-performance of this product on a particular weed to your Nufarm representative, local retailer, or county extension agent.

Management of Glyphosate-Resistant Biotypes

Since the occurrence of new glyphosate-resistant weeds cannot be determined until after product use and scientific confirmation, manufacturer is not responsible for any losses that may result from the failure of this product to control glyphosate-resistant weed biotypes.

The following good agronomic practices are recommended to reduce the spread of confirmed glyphosate-resistant biotypes:

- If a naturally occurring resistant biotype is present in your application site, this product should be tank-mixed or applied sequentially with an appropriately labeled herbicide with a different mode of action to achieve control.
- Cultural and mechanical control practices (e.g. crop rotation or tillage) may also be used as appropriate.
- Scout treated application site after herbicide applications and control escaping weeds including resistant biotypes before they set seed.
- Thoroughly clean equipment before leaving fields known to contain resistant biotypes.

MIXING AND APPLICATION INSTRUCTIONS

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES. HAND-GUN APPLICATIONS MUST BE PROPERLY DIRECTED TO AVOID SPRAYING DESIRABLE PLANTS. NOTE: REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

TANK MIXTURES

Always predetermine the compatibility of labeled tank mixtures of this product with water carrier by mixing small proportional quantities in advance. Mix labeled tank mixtures of this product with water as follows:

1. Place a 20 to 35 mesh screen or wetting basket over filling port.
2. Through the screen, fill the spray tank one-half full with water and start agitation.
3. If a wettable powder is used, make a slurry with the water carrier, and add it SLOWLY through the screen into the tank. Continue agitation.
4. If a flowable formulation is used, premix one part flowable with one part water. Add diluted mixture SLOWLY through the screen into the tank. Continue agitation.
5. If an emulsifiable concentrate formulation is used, premix one part emulsifiable concentrate with two parts water. Add diluted SLOWLY through the screen into the tank. Continue agitation.
6. Continue filling the spray tank with water and add the required amount of this product near the end of the filling process.
7. Where nonionic surfactant is recommended, add this to the spray tank before completing the filling process.
8. Add individual formulations to the spray tank as follows: wettable powder, flowable, emulsifiable concentrate, drift control additive, water soluble liquid followed by surfactant.



Maintain good agitation at all times until the contents of the tank are sprayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed. To prevent or minimize foam, avoid the use of mechanical agitators, place the filling hose below the surface of the spray solution, terminate by-pass and return lines at the bottom of the tank and if needed use an approved anti-foam or defoaming agent.

Use screen size in nozzle or line strainers that are no finer than 50 mesh. Carefully select proper nozzle to avoid spraying a fine mist. For best results with conventional ground application equipment, use flat fan nozzles.

Clean sprayer and parts immediately after using this product by thoroughly flushing with water.

For best results with conventional ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

When using this product, mix 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution. Use a nonionic surfactant labeled for use with herbicides. The surfactant must contain 50 percent or more active ingredient.

Always read and follow the manufacturer's surfactant label instructions for best results.

Do not use surfactants in excess of 1 quart per acre when making broadcast applications.

Colorants or marking dyes approved for use with herbicides may be added to spray mixtures of this product. Colorants or dyes used in spray solutions of this product may reduce performance, especially at lower rates or dilutions. Use colorants or dyes according to the manufacturer's label instructions.

Clean sprayer and parts immediately after using this product by thoroughly flushing with water and dispose of rinsate according to labeled use or disposal instructions.

Carefully observe all cautionary statements and other information appearing in the surfactant label.

APPLICATION EQUIPMENT AND TECHNIQUES

This product may be applied with the following application equipment:

Broadcast Spray

Controlled Droplet Applicator (CDA) - Hand-held or boom-mounted applicators which produce a spray consisting of a narrow range of droplet sizes.

Hand-Held and High-Volume Spray Equipment* - Knapsack and backpack sprayers, pump-up pressure sprayers, handguns, handwands, lances and other hand-held and motorized spray equipment used to direct the spray onto weed foliage.

*This product is not registered in California or Arizona for use in mistblowers.

Selective Equipment - Recirculating sprayers and wiper applicators. See the appropriate part of this section for specific instructions and rates of application.

Aerial - Fixed Wing and Helicopter

APPLICATION INFORMATION

Observe the following directions to minimize off-site movement during aerial application of this herbicide. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor, and aerial applicator.

BOOM EQUIPMENT

For control of weed or brush species listed in this label using conventional boom equipment - Use the specified rates of this product and surfactant in 3 to 30 gallons of water per acre as a broadcast spray, unless otherwise specified. See the "WEEDS CONTROLLED" section of this label for specific rates. As density of vegetation increases, spray volume may be increased within the specified range to ensure complete coverage. Carefully select correct nozzle to avoid spraying a fine mist. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

HAND-HELD AND HIGH-VOLUME EQUIPMENT

Use Coarse Sprays Only

For control of weeds listed in this label using knapsack sprayers or high-volume spraying equipment utilizing handguns or other suitable nozzle arrangements - Prepare a 0.75 to 2 percent solution of this product in water, add a nonionic surfactant and apply to foliage of vegetation to be controlled. For specific rates of application and instructions for control of various annual and perennial weeds, see the "WEEDS CONTROLLED" section in this label.

Apply on a spray-to-wet basis so that the spray coverage is uniform and complete. Do not spray to point of runoff.

This product may be used as a 5 to 8 percent solution plus 0.5 to 1 fluid ounce non-ionic surfactant per gallon spray solution for low-volume directed sprays for spot treatment of trees and brush. It is most effective in areas where there is a low density of undesirable trees or brush. If a straight stream nozzle is used, start the application at the top of the targeted vegetation and spray from top to bottom in a lateral zig-zag motion. Ensure that at least 50 percent of the leaves are contacted by the spray solution. For flat fan and cone nozzles and with hand-directed mist blowers, mist the application over the foliage of the targeted vegetation. Small, open-branched trees need only be treated from one side. If the foliage is thick or there are multiple root sprouts, applications must be made from several sides to ensure adequate spray coverage.



For use in knapsack sprayers, it is suggested that the specified amount of this product be mixed with water in a large container. Fill sprayer with the mixed solution and add the correct amount of surfactant.

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

SPRAY SOLUTION

DESIRED VOLUME	AMOUNT OF PRODUCT					
	0.75%	1.0%	1.25%	1.5%	5.0%	8.0%
1 Gallon	1.0 fl. oz.	1.33 fl. oz.	1.66 fl. oz.	2.0 fl. oz.	6.0 fl. oz.	10.25 fl. oz.
25 Gallons	1.5 pts.	1.0 qt.	1.25 qts.	1.5 qts.	5.0 qts.	2.0 gals.
100 Gallons	3.0 qts.	1.0 gal.	1.25 gals.	1.5 gals.	5.0 gals.	8.0 gals.

2 Tablespoons = 1 fluid ounce

SELECTIVE EQUIPMENT

For terrestrial application, this product may be applied through a shielded applicator, or a wiper applicator after dilution and thorough mixing with water to listed weeds growing in any non-crop site specified on this label.

- A shielded applicator directs the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.
- A wiper applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution.

AVOID CONTACT WITH DESIRABLE VEGETATION.

This section summarizes the general weed control spectrum and rates of application for this herbicide. Additional information specific to individual use patterns is detailed in following sections.

AERIAL EQUIPMENT

Use the specified rates of this product and surfactant in 3 to 20 gallons of water per acre as a broadcast spray, unless otherwise specified. See the "WEEDS CONTROLLED" section of this label for specific rates. Unless otherwise specified, do not exceed 1.5 pints per acre. Aerial applications of this product may only be made as specified in this label.

AVOID DRIFT - DO NOT APPLY DURING LOW-LEVEL INVERSION CONDITIONS, WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED. Coarse sprays are less likely to drift; therefore, do not use nozzles or nozzle configurations which dispense spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure above the manufacturer's instructions.

Drift control additives may be used. When a drift control additive is used, read and carefully observe the precautionary statements and all other information appearing in the additive label.

Ensure uniform application - To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38413 may prevent corrosion.

For use of this product by air in California see additional instructions in "FOR AERIAL APPLICATION IN CALIFORNIA ONLY" Section.

FOR AERIAL APPLICATION IN CALIFORNIA ONLY

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE, GREEN STEMS, OR FRUIT OF DESIRABLE CROPS, PLANTS, TREES, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

Written Directions

A written direction MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. This written direction MUST state the proximity of surrounding crops, and that conditions of each manufacturer's applicable product label(s) and this label have been satisfied.

Aerial Applicator Training and Equipment

Aerial application of this herbicide is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight, and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to insure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commissioner approved "fly-ins" constitutes such documentation, or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.





Application at night

Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

Aquatic and Other Noncrop Sites

When applied as directed and under the conditions described in the "Weeds Controlled" section of the label booklet for this product, this herbicide will control or partially control the labeled weeds growing in the following industrial, recreational and public areas, or other similar sites.

Aquatic Sites-including all bodies of fresh and brackish water which may be flowing, nonflowing or transient. This includes lakes, rivers, streams, ponds, seeps, irrigation ditches, canals, reservoirs, estuaries and similar sites.

If aquatic sites are present in the noncrop areas and are part of the intended treatment, read and observe the following directions: There is no limit on the use of treated water for irrigation, recreation or domestic purposes.

Consult local state fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.

NOTE: Do not apply this product within 1/2 mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 1/2 mile of an active potable water intake in a standing body of water such as a lake, pond or reservoir. To make aquatic applications around and within 1/2 mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 parts per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after application.

This product does not control plants which are completely submerged or have a majority of their foliage underwater.

AVOID DRIFT - DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION WHICH WILL ALLOW DRIFT. DRIFT MAY CAUSE DAMAGE TO ANY VEGETATION CONTACTED TO WHICH TREATMENT IS NOT INTENDED. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFER ZONES MUST BE MAINTAINED.

Use the following guidelines when aerial applications are made near crops or desirable perennial vegetation after bud break and before total leaf drop, and/or near other desirable vegetation or annual crops.

1. Do not apply within 100 feet of all desirable vegetation or crop(s).
2. If wind up to 5 miles per hour is blowing toward desirable vegetation or crop(s), do not apply within 500 feet of the desirable vegetation or crop(s).
3. Winds blowing from 5 to 10 miles per hour toward desirable vegetation or crop(s) may require buffer zones in excess of 500 feet.
4. Do not apply when winds are in excess of 10 miles per hour or when inversion conditions exist.

FOR AERIAL APPLICATION IN FRESNO COUNTY, CALIFORNIA ONLY

(From February 15 through March 31 only)

For aerial application outside of these dates (April 1 through February 14), refer to the "FOR AERIAL APPLICATION IN CALIFORNIA ONLY" section printed above.

Applicable Area

This supplement only applies to the area contained inside the following boundaries within Fresno County, California only.

North: Fresno County line

South: Fresno County line

East: State Highway 99

West: Fresno County line

Information

Always read and follow the label directions and precautionary statements for all products used in the aerial application. Observe the following directions to minimize off-site movement during aerial application of this product. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor and aerial applicator.

Written directions MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. This written direction MUST state the proximity of surrounding crops, and that conditions of each manufacturer's product label and this label have been satisfied.

Aerial Applicator Training and Equipment

Aerial application of this product is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to insure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commissioner approved fly-ins constitutes such documentation, or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.



Applications at Night—Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

For aerial application from April 1 through February 14, refer to the “FOR AERIAL APPLICATION IN CALIFORNIA ONLY” section printed above.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. The following drift management requirements must be followed to avoid off-target drift movement from aerial applications. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outer most operating nozzles on the boom must not exceed 3/4 the length of the rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downward more than 45 degrees. Where states have more stringent regulations, they must be observed.

The applicator must be familiar with and take into account the information covered in the [Aerial Drift Reduction Advisory Information](#).

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions sections of this label).

Controlling Droplet Size

- **Volume** - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure** - Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure. Higher pressure reduces droplet size and does not improve canopy protection.
- **Number of Nozzles** - Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation** - Orienting nozzles so that the spray is released backwards, parallel to the air stream produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type** - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.
- **Boom Length** - For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.
- **Application Height** - Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance must increase, with increasing drift potential (higher wind, smaller drops, etc.).

Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Do not make applications when wind speed is below 2 mph due to variable wind direction and high inversion potential. Note: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications must not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of the smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.



Sensitive Areas

Only make applications when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

WEEDS CONTROLLED

ANNUAL WEEDS

Apply to actively growing annual grasses and broadleaf weeds.

Allow at least 3 days after application before disturbing treated vegetation. After this period the weeds may be mowed, tilled or burned. See "DIRECTIONS FOR USE", "PRODUCT INFORMATION" and "MIXING AND APPLICATION INSTRUCTIONS" for labeled uses and specific application instructions.

Broadcast Application - Use 1-1/2 pints of this product per acre plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution, if weeds are less than 6 inches tall. If weeds are greater than 6 inches tall, use 2-1/2 pints of this product per acre plus 2 or more quarts of an approved nonionic surfactant per 100 gallons of spray solution.

Hand-Held, High-Volume Application - Use a 3/4 percent solution of this product in water plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution and apply to foliage of vegetation to be controlled.

When applied as directed under the conditions described in this label, this product plus nonionic surfactant WILL CONTROL the following ANNUAL WEEDS:

Balsamapple*	Foxtail	Rocket, London
<i>Momordica charantia</i>	<i>Setaria spp.</i>	<i>Sisymbrium irio</i>
Barley	Foxtail, Carolina	Rye
<i>Hordeum vulgare</i>	<i>Alopecurus carolinianus</i>	<i>Secale cereale</i>
Barnyardgrass	Groundsel, common	Ryegrass, Italian*
<i>Echinochloa crus-galli</i>	<i>Senecio vulgaris</i>	<i>Lolium multiflorum</i>
Bassia, fivehook	Horseweed/Marestail	Sandbur, field
<i>Bassia hyssopifolia</i>	<i>Conzyza canadensis</i>	<i>Cenchrus spp.</i>
Bluegrass, annual	Kochia*	Shattercane
<i>Poa annua</i>	<i>Kochia scoparia</i>	<i>Sorghum bicolor</i>
Bluegrass, bulbous	Lambsquarters, common	Shepherd's-purse
<i>Poa bulbosa</i>	<i>Chenopodium album</i>	<i>Capsella bursa-pastoris</i>
Brome*	Lettuce, prickly*	Signalgrass, broadleaf
<i>Bromus spp.</i>	<i>Lactuca serriola</i>	<i>Bracharia platyphylla</i>
Buttercup	Morning glory	Smartweed, Pennsylvania
<i>Ranunculus spp.</i>	<i>Ipomoea spp.</i>	<i>Polygonum pensylvanicum</i>
Cheat	Mustard, blue	Sowthistle, annual*
<i>Bromus secalinus</i>	<i>Chorispora tenella</i>	<i>Sonchus oleraceus</i>
Chickweed, mouseear	Mustard, tansy	Spanishneedles*
<i>Cerastium vulgatum</i>	<i>Descurainia pinnata</i>	<i>Bidens bipinnata</i>
Cocklebur	Mustard, tumble	Spurry, umbrella
<i>Xanthium strumarium</i>	<i>Sisymbrium altissimum</i>	<i>Holosteum umbellatum</i>
Corn, volunteer	Mustard, wild	Stinkgrass
<i>Zea mays</i>	<i>Sinapis arvensis</i>	<i>Eragrostis ciliaris</i>
Crabgrass	Oats, wild	Sunflower*
<i>Digitaria spp.</i>	<i>Avena fatua</i>	<i>Helianthus annuus</i>
Dwarf dandelion	Panicum*	Thistle, Russian
<i>Krigia cespitosa</i>	<i>Panicum spp.</i>	<i>Salsola kali</i>
False dandelion	Pennycress, field	Velvetleaf*
<i>Krigia cespitosa</i>	<i>Thlaspi arvense</i>	<i>Abutilon theophrasti</i>
Falseflax, smallseed	Pigweed, redroot	Wheat
<i>Camelina microcarpa</i>	<i>Amaranthus retroflexus</i>	<i>Triticum aestivum</i>
Fiddleneck*	Pigweed, smooth	Witchgrass
<i>Amsinckia spp.</i>	<i>Amaranthus hybridus</i>	<i>Panicum capillare</i>
Flax leaf fleabane*	Ragweed, common*	
<i>Conyza bonariensis</i>	<i>Ambrosia artemisiifolia</i>	
Fleabane	Ragweed, giant*	
<i>Erigeron spp.</i>	<i>Ambrosia trifida</i>	

*Apply 3 pints of this product per acre.

**Apply with hand-held equipment only.

Annual weeds will generally continue to germinate from seed throughout the growing season. Repeat treatments will be necessary to control later germinating weeds.





PERENNIAL WEEDS

Apply this product as follows to control or destroy most vigorously growing perennial weeds. Unless otherwise directed, allow at least 7 days after application before disturbing vegetation.

See individual control instructions for specific weeds following the table. For other perennials listed on this label, apply 4-1/2 to 7-1/2 pints of product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached early head or early bud stage of growth.

Add 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution to the rates of this product given in this list. See the "PRODUCT INFORMATION", "DIRECTIONS FOR USE" and "MIXING AND APPLICATION" sections in this label for specific uses and application instructions.

NOTE: If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages. Fall treatments must be applied before a killing frost.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seed.

When applied as specified under the conditions described, this product plus surfactant WILL CONTROL the following PERENNIAL WEEDS:

Alfalfa	Fescue, tall	Paragrass
<i>Medicago sativa</i>	<i>Festuca arundinacea</i>	<i>Bracharia mutica</i>
Alligatorweed*	Guineagrass	Phragmites**
<i>Alternanthera philoxeroides</i>	<i>Panicum maximum</i>	<i>Phragmites spp.</i>
Anise/Fennel	Hemlock, poison	Quackgrass
<i>Foeniculum vulgare</i>	<i>Conium maculatum</i>	<i>Agropyron repens</i>
Artichoke, Jerusalem	Horsenettle	Reed, giant
<i>Helianthus tuberosus</i>	<i>Solanum carolinense</i>	<i>Arundo donax</i>
Bahiagrass	Horseradish	Ryegrass, perennial
<i>Paspalum notatum</i>	<i>Armoracia rusticana</i>	<i>Lolium perenne</i>
Bermudagrass	Ice Plant	Smartweed, swamp
<i>Cynodon dactylon</i>	<i>Mesembryanthemum crystallinum</i>	<i>Polygonum coccineum</i>
Bindweed, field	Johnsongrass	Spatterdock
<i>Convolvulus arvensis</i>	<i>Sorghum halepense</i>	<i>Nuphar luteum</i>
Bluegrass, Kentucky	Kikuyugrass	Starthistle, yellow
<i>Poa pratensis</i>	<i>Pennisetum clandestinum</i>	<i>Centaurea solstitialis</i>
Blueweed, Texas	Knapweed	Sweet potato, wild*
<i>Helianthus ciliaris</i>	<i>Centaura repens</i>	<i>Ipomoea pandurata</i>
Brackenfern	Lantana	Thistle, artichoke
<i>Pteridium spp.</i>	<i>Lantana camara</i>	<i>Cynara cardunculus</i>
Bromegrass, smooth	Lespedeza: common, services	Thistle, Canada
<i>Bromus inermis</i>	<i>Lespedeza striata</i>	<i>Cirsium arvense</i>
Canarygrass, reed	<i>Lespedeza cuneata</i>	Timothy
<i>Phalaris arundinacea</i>	Loosestrife, purple	<i>Phleum pratense</i>
Cattail	<i>Lythrum salicaria</i>	Torpedograss*
<i>Typha spp.</i>	Lotus, American	<i>Panicum repens</i>
Clover, red	<i>Nelumbo lutea</i>	Tules, common
<i>Trifolium pratense</i>	Maidencane	<i>Scirpus acutus</i>
Clover, white	<i>Panicum hematomon</i>	Vaseygrass
<i>Trifolium repens</i>	Milkweed	<i>Paspalum urvillei</i>
Cogongrass	<i>Asclepias spp.</i>	Velvetgrass
<i>Imperata cylindrica</i>	Muhly, wirestem	<i>Holcus spp.</i>
Cordgrass	<i>Muhlenbergia frondosana</i>	Waterhyacinth
<i>Spartina spp.</i>	Mullein, common	<i>Eichornia crassipes</i>
Cutgrass, giant*	<i>Verbascum thapsus</i>	Waterlettuce
<i>Zizaniopsis miliacea</i>	Napiergrass	<i>Pistia stratiotes</i>
Dallisgrass	<i>Pennisetum purpureum</i>	Waterprimrose
<i>Paspalum dilatatum</i>	Nightshade, silverleaf	<i>Ludwigia spp.</i>
Dandelion	<i>Solanum elaeagnifolium</i>	Wheatgrass, western
<i>Taraxacum officinale</i>	Nutsedge: purple, yellow	<i>Agropyron smithii</i>
Dock, curly	<i>Cyperus rotundus</i>	
<i>Rumex crispus</i>	<i>Cyperus esculentus</i>	
Dogbane, hemp	Orchardgrass	
<i>Apocynum cannabinum</i>	<i>Dactylis glomerata</i>	
Fescue	Pampas grass	
<i>Festuca spp.</i>	<i>Cortaderia jubata</i>	

*Partial control.

**Partial control in southeastern states. See specific instructions below.



Alligatorweed - Apply 6 pints of this product per acre as a broadcast spray or as a 1-1/4 percent solution with hand-held equipment to provide partial control of alligatorweed. Apply when most of the target plants are in bloom. Repeat applications will be required to maintain such control.

Bermudagrass - Apply 7-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and when seedheads appear.

Bindweed, field/Silverleaf Nightshade/Texas Blueweed - Apply 6 to 7-1/2 pints of this product per acre as a broadcast spray west of the Mississippi River and 4-1/2 to 6 pints of this product per acre east of the Mississippi River. With hand-held equipment, use a 1-1/2 percent solution. Apply when target plants are actively growing and are at or beyond full bloom. For silverleaf nightshade, best results can be obtained when application is made after berries are formed. Do not treat when weeds are under drought stress. New leaf development indicates active growth. For best results apply in late summer or fall.

Brackenfern - Apply 4-1/2 to 6 pints of this product per acre as a broadcast spray or as a 3/4 to 1 percent solution with hand-held equipment. Apply to fully expanded fronds which are at least 18 inches long.

Cattail - Apply 4-1/2 to 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and are at or beyond the early-to-full bloom stage of growth. Best results are achieved when application is made during the summer or fall months.

Cogongrass - Apply 4-1/2 to 7-1/2 pints of this product per acre as a broadcast spray. Apply when cogongrass is at least 18 inches tall and actively growing in late summer or fall. Allow 7 or more days after application before tillage or mowing. Due to uneven stages of growth and the dense nature of vegetation preventing good spray coverage, repeat treatments may be necessary to maintain control.

Cordgrass - Apply 4-1/2 to 7-1/2 pints of this product per acre as a broadcast spray or as a 1 to 2 percent solution with hand-held equipment. Schedule applications in order to allow 6 hours before treated plants are covered by tidewater. The presence of debris and silt on the cordgrass plants will reduce performance. It may be necessary to wash targeted plants prior to application to improve uptake of this product into the plant.

Cutgrass, giant - Apply 6 pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment to provide partial control of giant cutgrass. Repeat applications will be required to maintain such control, especially where vegetation is partially submerged in water. Allow for substantial regrowth to the 7- to 10-leaf stage prior to retreatment.

Dogbane, hemp/Knapweed/Horseradish - Apply 6 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth. For best results, apply in late summer or fall.

Fescue, tall - Apply 4-1/2 pints of this product per acre as a broadcast spray or as a 1 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained.

Guineagrass - Apply 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and when most have reached at least the 7-leaf stage of growth.

Johnsongrass/Bluegrass, Kentucky/Bromegrass, smooth/Canarygrass, reed/Orrchardgrass/Ryegrass, perennial/Timothy/Wheatgrass, western - Apply 3 to 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the boot-to-head stage of growth. When applied prior to the boot stage, less desirable control may be obtained. In the fall, apply before plants have turned brown.

Lantana - Apply this product as a 3/4 to 1 percent solution with hand-held equipment. Apply to actively growing Lantana at or beyond the bloom stage of growth. Use the higher application rate for plants that have reached the woody stage of growth.

Loosestrife, purple - Apply 4 pints of this product per acre as a broadcast spray or as a 1 to 1-1/2 percent solution using hand-held equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost.

Lotus, American - Apply 4 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Treat when plants are actively growing at or beyond the bloom stage of growth. Best results are achieved when application is made during summer or fall months. Fall treatments must be applied before a killing frost. Repeat treatment may be necessary to control regrowth from underground parts and seeds.

Maidencane/Paragrass - Apply 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Repeat treatments will be required, especially to vegetation partially submerged in water. Under these conditions, allow for regrowth to the 7- to 10-leaf stage prior to retreatment.

Milkweed, common - Apply 4-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached the late bud-to-flower stage of growth.

Nutsedge: purple, yellow - Apply 4-1/2 pints of this product per acre as a broadcast spray, or as a 3/4 percent solution with hand-held equipment to control existing nutsedge plants and immature nutlets attached to treated plants. Apply when target plants are in flower or when new nutlets can be found at rhizome tips. Nutlets which have not germinated will not be controlled and may germinate following treatment. Repeat treatments will be required for long-term control.

Pampasgrass - Apply a 1-1/2 percent solution of this product with hand-held equipment when plants are actively growing.



Phragmites - For partial control of phragmites in Florida and the counties of other states bordering the Gulf of Mexico, apply 7-1/2 pints per acre as a broadcast spray or apply a 1-1/2 percent solution with hand-held equipment. In other areas of the U.S., apply 4 to 6 pints per acre as a broadcast spray or apply a 3/4 percent solution with hand-held equipment for partial control. For best results, treat during late summer or fall months when plants are actively growing and in full bloom. Due to the dense nature of the vegetation, which may prevent good spray coverage and uneven stages of growth, repeat treatments may be necessary to maintain control. Visual control symptoms will be slow to develop.

Quackgrass/Kikuyugrass/Muhly, wirestem - Apply 3 to 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment when most quackgrass or wirestem muhly is at least 8 inches in height (3- to 4-leaf stage of growth) and actively growing. Allow 3 or more days after application before tillage.

Reed, giant/ice plant - For control of giant reed and ice plant, apply a 1-1/2 percent solution of this product with hand-held equipment when plants are actively growing. For giant reed, best results are obtained when applications are made in late summer to fall.

Spatterdock - Apply 6 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment. Apply when most plants are in full bloom. For best results, apply during the summer or fall months.

Sweet potato, wild - Apply this product as a 1-1/2 percent solution using hand-held equipment. Apply to actively growing weeds that are at or beyond the bloom stage of growth. Repeat applications will be required. Allow the plant to reach the recommended stage of growth before retreatment.

Thistle: Canada, artichoke - Apply 3 to 4-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment for Canada thistle. To control artichoke thistle, apply a 2 percent solution as a spray to wet application. Apply when target plants are actively growing and are at or beyond the bud stage of growth.

Torpedograss - Apply 6 to 7-1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment to provide partial control of torpedograss. Use the lower rates under terrestrial conditions, and the higher rates under partially submerged or a floating mat condition. Repeat treatments will be required to maintain such control.

Tules, common - Apply this product as a 1-1/2 percent solution with hand-held equipment. Apply to actively growing plants at or beyond the seedhead stage of growth. After application, visual symptoms will be slow to appear and may not occur for 3 or more weeks.

Waterhyacinth - Apply 5 to 6 pints of this product per acre as a broadcast spray or apply a 3/4 to 1 percent solution with hand-held equipment. Apply when target plants are actively growing and at or beyond the early bloom stage of growth. After application, visual symptoms may require 3 or more weeks to appear with complete necrosis and decomposition usually occurring within 60 to 90 days. Use the higher rates when more rapid visual effects are desired.

Waterlettuce - For control, apply a 3/4 to 1 percent solution using hand-held equipment to actively growing plants. Use higher rates where infestations are heavy. Best results are obtained from mid-summer through winter applications. Spring applications may require retreatment.

Waterprimrose - Apply this product as a 3/4 percent solution using hand-held equipment. Apply to plants that are actively growing at or beyond the bloom stage of growth, but before fall color changes occur. Thorough coverage is necessary for best control.

Other perennials listed on this label - Apply 4-1/2 to 7-1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment. Apply when target plants are actively growing and most have reached early head or early bud stage of growth.

WOODY BRUSH AND TREES

See individual control instructions for specific woody brush and trees to be controlled in the following table. For partial control of other woody brush and trees listed in the table, apply 1.5 to 7.5 quarts of this product per acre as a broadcast spray or as a 0.75 to 10 percent solution with hand-held equipment.

Apply the specified rate of this product plus 2 or more quarts of a nonionic surfactant per 100 gallons of spray solution when plants are actively growing and, unless otherwise directed, after full-leaf expansion. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth. Best results are obtained when application is made in late Summer or Fall after fruit formation.

Applied as a 5 to 8 percent solution as a directed application as described in the "HAND-HELD AND HIGH-VOLUME EQUIPMENT" section, this product will control or partially control all species listed in this section of the label. Use the higher rate of application for dense stands and larger woody brush and trees.

In arid areas, best results are obtained when application is made in the Spring or early Summer when brush species are at high moisture content and are flowering. Ensure thorough coverage when using hand-held equipment. Symptoms may not appear prior to frost or senescence with Fall treatment.

Allow 7 or more days after application before mowing or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Reduced performance may result if Fall treatments are made following a frost.



**Application Rates¹**

METHOD OF APPLICATION	APPLICATION RATE	SPRAY VOLUME (Gallons/Acre)
Broadcast Aerial Ground	1.5 to 7.5 qts./ acre 1.5 to 7.5 qts./ acre	5 to 30 10 to 60
Spray-to-Wet Handgun, Backpack, Mistblower	0.75% to 2.0% by volume	Spray-to-Wet
Low Volume Directed Spray² Handgun, Backpack, Mistblower	5.0% to 10.0% by volume	Partial Coverage

¹ Where repeat applications are necessary do not exceed 8.0 quarts per acre per year.

² For low volume directed spray applications, coverage should be uniform with at least 50 percent of the foliage contacted. For best results, coverage of the top one-half of the plant is important.

NOTE: If brush has been mowed or tilled or trees have been cut, do not treat until regrowth has reached the recommended stage of growth.

When applied as specified under the conditions described, this product plus surfactant CONTROLS or PARTIALLY CONTROLS the following woody brush plants and trees:

Alder <i>Alnus</i> spp.	Dewberry <i>Rubus trivialis</i>	Monkey Flower* <i>Mimulus guttatus</i>
Ash* <i>Fraxinus</i> spp.	Dogwood <i>Cornus</i> spp.	Oak: Black* <i>Quercus velutina</i>
Aspen, quaking <i>Populus tremuloides</i>	Elderberry <i>Sambucus</i> spp.	Northern pine <i>Quercus palustris</i>
Bearclover, Bearmat <i>Chamaebatia foliolosa</i>	Elm* <i>Ulmus</i> spp.	Post <i>Quercus stellata</i>
Birch <i>Betula</i> spp.	Eucalyptus, bluegum <i>Eucalyptus globulus</i>	Red <i>Quercus rubra</i>
Blackberry <i>Rubus</i> spp.	Hasardia* <i>Haplopappus squamosus</i>	Southern red <i>Quercus falcata</i>
Broom: French <i>Cytisus monspessulanus</i>	Hawthorn <i>Crataegus</i> spp.	White* <i>Quercus alba</i>
Scotch <i>Cytisus scoparius</i>	Hazel <i>Corylus</i> spp.	Persimmon* <i>Diospyros</i> spp.
Buckwheat, California* <i>Eriogonum fasciculatum</i>	Hickory <i>Carya</i> spp.	Poison Ivy <i>Rhus radicans</i>
Cascara* <i>Rhamnus purshiana</i>	Holly, Florida; Brazilian Peppertree <i>Schinus terebinthifolius</i>	Poison Oak <i>Rhus toxicodendron</i>
Catclaw* <i>Acacia greggi</i>	Honeysuckle <i>Lonicera</i> spp.	Poplar, yellow* <i>Liriodendron tulipifera</i>
Ceanothus <i>Ceanothus</i> spp.	Hornbeam, American <i>Carpinus caroliniana</i>	Prunus <i>Prunus</i> spp.
Chamise <i>Adenostoma fasciculatum</i>	Kudzu <i>Pueraria lobata</i>	Raspberry <i>Rubus</i> spp.
Cherry: Bitter <i>Prunus emarginata</i>	Locust, black* <i>Robinia pseudoacacia</i>	Redbud, eastern <i>Cercis canadensis</i>
Black <i>Prunus serotina</i>	Manzanita <i>Arctostaphylos</i> spp.	Rose, multiflora <i>Rosa multiflora</i>
Pin <i>Prunus pensylvanica</i>	Maple: Red** <i>Acer rubrum</i>	Russian-olive <i>Elaeagnus angustifolia</i>
Coyote brush <i>Baccharis consanguinea</i>	Sugar <i>Acer saccharum</i>	Sage: black, white <i>Salvia</i> spp.
Creeper, Virginia* <i>Parthenocissus quinquefolia</i>	Vine* <i>Acer circinatum</i>	Sagebrush, California <i>Artemesia californica</i>

(continued)



Salmonberry
Rubus spectabilis
Salt cedar*
Tamarix spp.
Saltbush, Sea myrtle
Baccharis halimifolia
Sassafras
Sassafras albidum
Sourwood*
Oxydendrum arboreum

Sumac:
Poison*
Rhus vernix
Smooth*
Rhus glabra
Winged*
Rhus copallina
Sweet gum
Liquidambar styraciflua
Swordfern*
Polystichum munitum

Tallowtree, Chinese
Sapium sebiferum
Thimbleberry
Rubus parviflorus
Tobacco, tree*
Nicotiana glauca
Trumpet creeper
Campsis radicans
Waxmyrtle, southern*
Myrica cerifera
Willow
Salix spp.

*Partial control

**See below for control or partial control instruction.

See the "DIRECTIONS FOR USE" and "MIXING AND APPLICATION INSTRUCTIONS" sections in this label for labeled use and specific application instructions.

Apply the product as follows to control or partially control the following woody brush and trees.

Alder/Blackberry/Dewberry/Honeysuckle/Oak, Post/Raspberry - For control, apply 4-1/2 to 6 pints per acre as a broadcast spray or as a 3/4 to 1-1/4 percent solution with hand-held equipment.

Aspen, Quaking/Hawthorn/Trumpet creeper - For control, apply 3 to 4-1/4 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/4 percent solution with hand-held equipment.

Birch/Elderberry/Hazel/Salmonberry/Thimbleberry - For control, apply 3 pints per acre of this product as a broadcast spray or as a 3/4 percent solution with hand-held equipment.

Broom: French, Scotch - For control, apply a 1-1/4 to 1-1/2 percent solution with hand-held equipment.

Buckwheat, California/Hasardia/Monkey Flower/Tobacco, Tree - For partial control of these species apply a 3/4 to 1-1/2 percent solution of this product as a foliar spray with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Catsclaw - For partial control, apply a 1-1/4 to 1-1/2 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Cherry: Bitter, Black, Pin/Oak, Southern Red/Sweet Gum/Prunus - For control, apply 3 to 7-1/2 pints of this product per acre as a broadcast spray or as a 1 to 1-1/2 percent solution with hand-held equipment.

Coyote brush - For control, apply a 1-1/4 to 1-1/2 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Dogwood/Hickory/Salt cedar - For partial control, apply a 1 to 2 percent solution of this product with hand-held equipment or 6 to 7-1/2 pints per acre as a broadcast spray.

Eucalyptus, bluegum - For control of eucalyptus resprouts, apply a 1-1/2 percent solution of this product with hand-held equipment when resprouts are 6- to 12-feet tall. Ensure complete coverage. Apply when plants are actively growing. Avoid application to drought-stressed plants.

Holly, Florida/Waxmyrtle, southern - For partial control, apply this product as a 1-1/2 percent solution with hand-held equipment.

Kudzu - For control, apply 6 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Repeat applications will be required to maintain control.

Maple, Red - For control, apply as a 3/4 to 1-1/4 percent solution with hand-held equipment when leaves are fully developed. For partial control, apply 2 to 7-1/2 pints of this product per acre as a broadcast spray.

Maple, Sugar/Oak: Northern Pine, Red - For control, apply as a 3/4 to 1-1/4 percent solution with hand-held equipment when at least 50 percent of the new leaves are fully developed.

Poison Ivy/Poison Oak - For control, apply 6 to 7-1/2 pints of this product per acre as a broadcast spray or as a 1-1/2 percent solution with hand-held equipment. Repeat applications may be required to maintain control. Fall treatments must be applied before leaves lose green color.

Rose, multiflora - For control, apply 3 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment. Make treatments prior to leaf deterioration by leaf-feeding insects.

Sage, black/Sagebrush, California/Chamise/Tallowtree, Chinese - For control of these species, apply a 3/4 percent solution with hand-held equipment. Thorough coverage of foliage is necessary for best results.

Saltbush, Sea myrtle - For control, apply this product as a 1 percent solution with hand-held equipment.

Willow - For control, apply 4-1/2 pints of this product per acre as a broadcast spray or as a 3/4 percent solution with hand-held equipment.

Other woody brush and trees listed in this label - For partial control, apply 3 to 7-1/2 pints of this product per acre as a broadcast spray or as a 3/4 to 1-1/2 percent solution with hand-held equipment.



PASTURE AND RANGELANDS

PASTURES

LABLED GRASSES: Bahiagrass, Bermudagrass, Bluegrass, Brome, Fescue, Guineagrass, Kikuyugrass, Orchardgrass, Pangola grass, Ryegrass, Timothy and Wheatgrass.

TYPES OF APPLICATIONS: Preplant, Preemergence, Pasture Renovation, Spot Treatment, Over-the-Top Wiper Applications, Postemergent Weed Control (Broadcast Treatments).

Preplant, Preemergence, Pasture Renovation

USE INSTRUCTIONS: This product can be applied prior to planting or emergence of forage grasses or used to control perennial pasture species listed on this label prior to re-planting.

RESTRICTIONS: If application rates total 4.5 pints per acre or less, no waiting period between treatment and feeding of livestock grazing is required. If the rate is greater than 4.5 pints per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed for treatment in this label may be planted into the treated area at any time; for other crops, wait 30 days between application and planting.

Spot Treatment, Over-the-Top Wiper Applications

USE INSTRUCTIONS: This product can be applied as a spot treatment or with wiper applicators in pastures. Applications may be made in the same area at 30-day intervals.

PRECAUTIONS: To achieve maximum performance, remove domestic livestock before application and wait 7 days after application before grazing livestock or harvesting.

RESTRICTIONS: For spot treatments or wiper application methods using rates of 4.5 pints per acre or less, the entire field or any portion of it may be treated. When spot treatments or wiper application are made using rates above 4.5 pints per acre, no more than 10 percent of the total pasture may be treated at any one time.

Postemergent Weed Control (Broadcast Treatments)

USE INSTRUCTIONS: This product can be used to suppress competitive growth and seed production of annual weeds and undesirable vegetation in pastures. For selective applications with broadcast spray equipment, apply 9 to 12 fluid ounces of this product per acre in early spring before desirable perennial grasses break dormancy and initiate green growth. Late fall applications can be made after desirable perennial grasses have reached dormancy.

PRECAUTIONS: Some stunting of perennial grasses will occur if broadcast applications are made when plants are not dormant. No waiting period is required between application and grazing or harvesting for feed. Use of higher application rates will cause stand reductions.

RESTRICTIONS: Do not apply more than 72 fluid ounces per acre per year onto pasture grasses except for renovation uses (see instructions above). If replanting is needed due to severe stand reduction, applications must be made at least 30 days prior to planting any crop not listed for treatment in this label.

RANGELANDS

TYPES OF APPLICATIONS: Postemergence.

This product will control or suppress many annual weeds growing in perennial cool and warm-season grass rangelands.

Preventing viable seed production is key to the successful control and invasion of annual grassy weeds in rangelands. Follow-up applications in sequential years should eliminate most of the viable seeds. Delay grazing of treated areas to encourage growth of desirable perennials. Allowing desirable perennials to flower and reseed in the treated area will encourage successful transition.

USE INSTRUCTIONS: Apply 9 to 12 fluid ounces of this product per acre to control or suppress many weeds, including downy brome, cheatgrass, cereal rye and jointed goatgrass in rangelands. Apply when most brome plants are in early flower and before the plants, including seedheads, turn color. Allowing for secondary weed flushes to occur in the spring following rain events further depletes the seed reserve and encourages perennial grass conversion on weedy sites. Fall applications are possible, and recommended, where spring moisture is usually limited and fall germination allows for good weed growth.

For medusahead, apply 12 fluid ounces of this product per acre at the 3-leaf stage. Delaying applications beyond this stage will result in reduced or unacceptable control. Controlled burning may be useful in eliminating the thatch layer produced by slow decaying culms prior to application. Allow new growth to occur before spraying after a burn. Repeat applications in subsequent years may be necessary to eliminate the seedbank before reestablishing desirable perennial grasses in medusahead-dominated rangelands.

PRECAUTIONS: Slight discoloration of the desirable grasses may occur, but they will regreen and regrow under moist soil conditions as effects of this product wear off. No waiting period between treatment and feeding of livestock or grazing is required.

RESTRICTIONS: Do not use ammonium sulfate when spraying rangeland grasses with this product. Do not apply more than 4.5 pints per acre per year.

RANGELAND AND PASTURE THE USE OF SURFACTANT

When using this product for use on Rangeland and Pasture the use of a nonionic surfactant is required. Mix two or more quarts of a nonionic surfactant per 100 gallons of spray solution. Examples of when to use the higher surfactant rate include, but are not limited to: high water volumes, adverse environmental conditions, tough to control weeds, weeds under stress, surfactants with less than 70 percent active ingredient, tank mixes, etc.



When applied as directed under the conditions described, this product controls annual and perennial weeds listed in the label booklet. Do not reduce rates of this product when adding surfactant. DO NOT add buffering agents or pH adjusting agents to the spray solution when AquaNeat is the only pesticide used.

NON-CROP USES

See "PRODUCT INFORMATION" and "MIXING AND APPLICATION INSTRUCTIONS" sections of this label for essential product performance information and the following "NON-CROP" sections for specific uses.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OR SPRAY WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE TURFGRASSES, TREES, SHRUBS OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

Repeat treatments may be necessary to control weeds regenerating from underground parts or seeds. Where repeat applications are necessary, do not exceed 8 quarts of this product per acre per year.

This product does not provide residual weed control. For subsequent weed control, follow a label-approved herbicide program.

Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

INDUSTRIAL, RECREATIONAL AND PUBLIC AREAS

When applied as directed for "NON-CROP USES", under conditions described, this product may be used to control the listed weeds.

Non-Crop Sites - This product may be used to control the listed weeds in terrestrial noncrop sites and/or in aquatic sites within these areas:

airfields; airports; alleys, lanes, trails & access roads; around commercial or industrial structures or outbuildings; around farm and ranch structures and outbuildings; around ornamental gardens; around ornamental trees & shrubs; bare ground; beaches; campgrounds; construction sites; ditch banks; drive-in theaters; driveways & ramps; dry ditches & canals; fences & fencerows; firebreaks; golf courses; gravel yards; habitat restoration & management areas; highways & roadways (including aprons, medians, guardrails & right of ways); industrial plant sites; industrial areas; lumber yards; mulched areas; natural areas; paths and trails; parking areas; parks; paved areas; petroleum & other tank farms; pumping installations; pipeline, power, telephone & utility rights-of-way; power stations; preplant to turf & ornamental plants; railroad rights-of-way; recreation areas; refineries; resorts; schools; sidewalks; sports areas; storage areas; substations; tennis courts; uncropped farmland areas; uncultivated non-agricultural areas; vacant lots; walkways; wastelands; & wildlife habitat areas.

This product is a non-selective herbicide that is diluted and applied to the foliage of actively growing weeds as a spot or broadcast application. It is absorbed by the leaves and moves throughout the stem and roots to control the entire plant. Visible symptoms may require a week or more to appear, with burndown usually occurring in 2 to 4 weeks. Symptoms are a gradual wilting and yellowing of the sprayed plant followed by deterioration of both shoots and roots. This product has no herbicide activity in the soil and will not wash or leach to affect nearby vegetation. Any ornamental species may be planted in treated areas 7 days or more after application. For most effective results, delay mowing, clipping, planting or sodding of treated areas for at least 7 days after application. This allows time for this product to move within the plant.

For specific rates of application and instructions for control of particular annual weeds, perennial weeds, woody brush and trees, see the "WEEDS CONTROLLED" section of this label. These applications may be made to large affected areas or as spot treatments. For general use in small areas, see alternative instructions below under "Small Area Treatment With Hand-held Sprayers".

Unless the "Agriculture Use Requirements" on this label are observed, the following restrictions apply:

Not for use on plants being grown for sale or other commercial use, or for commercial seed production, or for research purposes. For use on plants intended for aesthetic purposes or climactic modification and being grown in ornamental gardens or parks, or on golf courses or lawns and grounds.

AVOID SPRAY DRIFT CONTACT WITH DESIRABLE LAWN GRASSES, FLOWERS, VEGETABLES, SHRUBS OR TREES. DO NOT CONTACT GREEN BARK OF TREES OR SHRUBS. IF DESIRABLE VEGETATION IS CONTACTED, WASH IMMEDIATELY WITH WATER. Depending on the type of non-crop application, this product may be applied with boom equipment, high-volume spray equipment and hand-held sprayers as described in the respective portions of the "APPLICATION EQUIPMENT and TECHNIQUES" section of the label. Additionally, the product may be applied with recirculating sprayers, shielded applicators, or wiper applicators in any non-crop site specified on this label. See the "Selective Equipment" part of "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on proper use and calibration of this equipment.

Small Area Treatment With Hand-held Sprayers

Add 2.25 to 4.5 fluid ounces of this product plus 0.5 to 1 fluid ounce of nonionic surfactant to 1 gallon of clean water. Use the low rate for many grasses and annual weeds. Use the higher specified rate for control of perennials and brush. Use pump-up sprayer, backpack sprayer or other sprayer suitable for small areas. Adjust equipment to deliver a coarse spray pattern. **USE OF HOSE-END SPRAYERS OR SPRINKLER-TYPE DEVICES MAY NOT BE USED.**

TANK MIXTURES FOR NON-CROP SITES

When applied as a tank mixture, this product provides control of the emerged annual weeds and partial control of the emerged perennial weeds listed in this label. When applied as a tank mixture, the following residual herbicides will provide preemergence control of the weeds listed in the individual product labels.



This product PLUS Diuron
 This product PLUS Kroval® I
This product PLUS Princep®, Caliber®90, Simazine 4L, 80W or 90DF
 This product PLUS Surflan®75W, Surflan AS
 This product PLUS Ronstar®50WP
 This product PLUS Spyder or Spyder Extra
 This product PLUS ProClipse
 This product PLUS Polaris AC Complete

When tank mixing with residual herbicides, add an nonionic surfactant at 0.5 to 1 percent by volume of spray solution. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label before preparing these tank mixtures.

Read and carefully observe the label claims, precautionary statements, specified use rate and all other information on the labels of all products used in these tank mixtures.

Use according to the most restrictive label directions for each product in the mixture.

CONTROL OF EMERGED WEEDS

Note: For backpack sprayer and handgun applications, see the "HAND-HELD AND HIGH VOLUME EQUIPMENT" section for specified rates.

Annual Weeds

Apply 1.5 pints per acre of this product in these tank mixtures when weeds are less than 6 inches tall and 2.25 pints per acre when weeds are more than 6 inches tall.

Perennial Weeds

For partial control of perennial weeds using these tank mixtures, apply 1.5 to 7.5 pints per acre of this product. Follow the recommendations in the "WEEDS CONTROLLED" section of this label for stage of growth and rate of application for specific perennial weeds.

PREEMERGENCE WEED CONTROL

For preemergence weed control, refer to the individual product labels for specific non-crop sites, rates, carrier volumes and precautionary statements.

Mix only the quantity of spray solution which can be used during the same day. Do not allow these tank mixtures to stand overnight as this may result in reduced weed control.

BROADCAST APPLICATION FOR WEED CONTROL IN CHRISTMAS TREE PLANTATIONS

NOTE: IF THIS PRODUCT IS IMPROPERLY APPLIED, IT HAS THE POTENTIAL TO CAUSE SEVERE INJURY TO CHRISTMAS TREES. FOLLOW ALL LABELED DIRECTIONS.

This product may be applied as a broadcast spray over established Christmas trees. To prevent drift onto nearby desirable crops or vegetation, ensure that adequate buffers are maintained.

The following Christmas tree species are approved for this application:

- Douglas Fir (*Pseudotsuga menziesii*)
- Fir species (*Abies* spp.)
- Spruce species (*Picea* spp.)

Do not apply this product until trees have completed at least a full growing season since planting or transplanting.

Pre-harvest Interval (PHI): Do not apply within 1 full year prior to tree harvest.

In the fall, applications may only be made after the formation of final conifer resting buds. Final resting buds must be in the dormant stage and fully hardened. If applications are made at any other time, unacceptable Christmas tree injury may occur.

Avoid spray pattern overlap, as injury may result.

Apply 24 fluid ounces of this product per acre in 5 to 30 gallons of water per acre.

NOTE: ADDING SURFACTANTS, ADDITIVES CONTAINING SURFACTANTS, OR ANY OTHER ADDITIVES TO THIS PRODUCT MAY RESULT IN SEVERE CHRISTMAS TREE INJURY.

In some areas, this product may be used at rates from 24 to 48 fluid ounces per acre. Consult your local Nufarm representative for specific instructions if you require rates that exceed 24 fluid ounces per acre.

Do not use drift control additives as they may increase Christmas tree injury. Do not use other herbicides in a tank mix with this product as Christmas trees could be severely injured.

SILVICULTURAL SITES AND RIGHTS-OF-WAY

NOTE: DO NOT USE AS AN OVER-THE-TOP BROADCAST SPRAY IN SILVICULTURAL NURSERIES.

When applied as directed for "NON-CROP USES" under conditions described this product controls undesirable vegetation listed on this label. This product also suppresses or controls undesirable vegetation listed on this label when applied at specified rates for release of established coniferous species listed on this label.

For specific rates of application and instructions for control of various brush, annual and perennial weeds, see the "WEEDS CONTROLLED" section of this label. For specific rates of application for release of listed coniferous species, see the "CONIFER RELEASE" part of this section of the label.



Where repeat applications are necessary, do not exceed 8 quarts of this product per acre per year.

Aerial Application

This product may be applied using aerial spray equipment for silvicultural site preparation, conifer release and rights-of-way treatments. See the "APPLICATION EQUIPMENT and TECHNIQUES" part of the "MIXING AND APPLICATION INSTRUCTIONS APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on how to apply this product by air.

DO NOT APPLY THIS PRODUCT BY AIR TO RIGHTS-OF-WAY SITES IN THE STATE OF CALIFORNIA.

For aerial application, do not exceed 8 quarts per acre per year.

The maximum aerial application rate is 7-1/2 quarts per application.

SITE PREPARATION

Following preplant applications of this product, any silvicultural species may be planted.

POST DIRECTED SPRAY

In established silvicultural sites, use as a spray on the foliage of undesirable vegetation. Care must be exercised to avoid contact of spray, drift or mist with foliage or green bark of desirable species.

CONIFER RELEASE

For release, apply at the end of the first growing season, except in California. Do not disturb vegetation of target weeds or trees prior to treatment or until visual symptoms appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late Fall. **Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active conifer growth.**

Applications must be made after formation of final conifer resting buds in the fall or prior to initial bud swelling in spring. Some autumn colors on undesirable deciduous species are acceptable provided no major leaf drop has occurred. Use the following rates for conifer release to control or partially control the weeds listed in the "WEEDS CONTROLLED" section of this label.

For release of the following conifer species:

Douglas Fir <i>Pseudotsuga menziesii</i>	Fir <i>Abies</i> spp.	Hemlock <i>Tsuga</i> spp.	Pines* <i>Pinus</i> spp.	Spruce <i>Picea</i> spp.
---	--------------------------	------------------------------	-----------------------------	-----------------------------

*Includes all species except eastern white pine, loblolly pine or slash pine.

Apply 2.25 to 3 pints of this product per acre except in Washington and Oregon, west of the crest of the Cascade Mountains. For Spring treatments west of the crest of the Cascade Mountains, apply 1 quart of this product per acre before conifer bud swell for control of annual weeds. For Fall treatments in Washington and Oregon, west of the crest of the Cascade Mountains, apply 1.5 to 2.25 pints of this product per acre before any major leaf drop of deciduous species. Add 10 fluid ounces nonionic surfactant per 2 pints of this product. In Maine, up to 4.5 pints per acre may be used for the control of difficult weeds.

Note for Douglas fir release: Ensure that surfactant has been adequately tested for Douglas fir safety and follow manufacturer's specifications for rate of application.

For release of Western hemlock, apply 1 quart of this product per acre.

For release of the following conifer species:

Loblolly Pine <i>Pinus taeda</i>	Eastern white pine <i>Pinus strobus</i>	Slash pine <i>Pinus elliottii</i>
-------------------------------------	--	--------------------------------------

Late Season Application - Apply 2-1/4 to 3 pints of this product in a minimum of 5 gallons of spray solution per acre during early autumn. Nutrafol does not recommend the use of a crop oil concentrate or MSO (methylated seed oil) based surfactant for use in southern conifer species release with this product. The addition of a tested and approved southern conifer release surfactant is recommended. Applications made prior to September 1 or when conditions are conducive to rapid growth of conifers will create the potential for increased injury in the form of tip and/or needle burn. Injury may decrease with later applications. Some autumn colors are acceptable at time of application. Apply prior to frost or leaf drop of undesirable plants.

Applications made according to label directions will release loblolly pine, eastern white pine and slash pine by reducing competition from the following species:

Ash <i>Fraxinus</i> spp.	Hawthorn <i>Crataegus</i> spp.	Oak, Post <i>Quercus stellata</i>	Poplar, yellow <i>Liriodendron tulipifera</i>	Sumac, Smooth <i>Rhus glabra</i>
Cherry, Black <i>Prunus serotina</i>	Locust, Black <i>Robinia pseudoacacia</i>	Oak, Southern Red <i>Quercus falcata</i>	Sassafras <i>Sassafras albidum</i>	Sumac, Winged <i>Rhus copallina</i>
Cherry, Pin <i>Prunus pensylvanica</i>	Maple, Red <i>Acer rubrum</i>	Oak, White <i>Quercus alba</i>	Sourwood <i>Oxydendrum arboreum</i>	Sweetgum <i>Liquidambar styraciflua</i>
Elm <i>Ulmus</i> spp.	Oak, Black <i>Quercus velutina</i>	Persimmon <i>Diospyros</i> spp.	Sumac, Poison <i>Rhus vernix</i>	

Apply only to those sites where woody brush and trees listed in this label constitute the majority of the undesirable species.

For aerial application, do not exceed 8 quarts per acre per year.

The maximum aerial application rate is 7-1/2 quarts per application.



THIS PRODUCT PLUS SPYDER TANK MIXTURES FOR CONIFER RELEASE FROM HERBACEOUS WEEDS

To release Loblolly pines, Slash, Red pine and Virginia pine from herbaceous weeds, tank mixtures of this product with Spyder will provide control of annual weeds listed in the "WEEDS CONTROLLED" section of this and the Spyder label, and partial control of the perennial weeds listed below.

Apply 12 to 18 fluid ounces of this product plus 2 to 4 fluid ounces of Spyder in 10 to 30 gallons of spray solution per acre. Nufarm does not recommend the use of a crop oil concentrate or MSO (methylated seed oil) based surfactant for use in southern conifer species release with this product. The addition of a tested and approved southern conifer release surfactant is recommended. Make application to actively growing weeds as a broadcast spray over the top of the young Loblolly pine, Red pine, Slash pine and Virginia pine.

This tank mixture may be applied using aerial equipment. For aerial application, do not exceed 8 quarts of this product (8 lbs. ae glyphosate) per acre per year. The maximum aerial application rate is 7-1/2 quarts per application.

When applying by air, use the specified rate in 5 to 15 gallons of spray solution per acre. This product plus Spyder tank mixtures may not be applied by air in California.

For control of annual weeds below 12 inches in height (or runner length on annual vines), use the lower rates of both products.

Use the higher rates of both products when annual weeds are in more advanced stages of growth and approaching flower or seed formation.

Use the higher rates of both products for partial control of the following perennial weeds. Use the lower rates for suppression of growth.

Bahiagrass <i>Paspalum notatum</i>	Dock, curly <i>Rumex crispus</i>	Fescues, tall <i>Festuca arundinacea</i>	Poorjoe* <i>Diodia teres</i>	Vaseygrass <i>Paspalum urvillei</i>
Broomsedge <i>Andropogon virginicus</i>	Dogfennel <i>Eupatorium capilliflorum</i>	Johnsongrass* <i>Sorghum halepense</i>	Trumpetcreeper** <i>Campsis radicans</i>	Vervain, blue <i>Verbena hastata</i>

*Control at the higher rates

**Suppression at the higher rates only.

Pine damage may occur or can be accentuated if treatment takes place when young trees are under stress from drought, flood water, insects or disease, or are in an active growth stage.

Read and observe the cautionary statements and all other information appearing on the labels of all herbicides used.

Note To User: This product must not be used in areas where adverse impact on federally designated endangered/threatened plant or aquatic species is likely. Prior to making applications, the user of this product must determine that no such species are located in or immediately adjacent to the area to be treated.

WILDLIFE HABITAT RESTORATION AND MANAGEMENT AREAS

This product is for the restoration and/or maintenance of native habitat and in wildlife management areas.

Habitat Restoration and Maintenance

When applied as directed, exotic and other undesirable vegetation may be controlled in habitat management areas. Applications may be made to allow recovery of native plant species, to open up water to attract waterfowl, and for similar broad-spectrum vegetation control requirements in habitat management areas. Spot treatments may be made to selectively remove unwanted plants for habitat enhancement. For spot treatments, care must be exercised to keep spray off of desirable plants.

Wildlife Food Plots

This product may be used as site preparation treatment prior to planting wildlife food plots. Apply as directed to control vegetation in the plot area. Any wildlife food species may be planted after applying this product, or native species may be allowed to re-infest the area. If tillage is needed to prepare a seedbed, wait 7 days after applying this product before tilling to allow for maximum effectiveness.

WIPER APPLICATIONS

For wick or wiper applications, mix 1 gallon of this product with 2 gallons of clean water to make a 33 percent solution. Addition of a nonionic surfactant at a rate of 10 percent by volume of total herbicide solution is recommended.

Wiper applications can be used to control or suppress annual and perennial weeds listed on this label. In heavy weed stands, a double application in opposite directions may improve results. See the "WEEDS CONTROLLED" section in this label for specified timing, growth stage and other instructions for achieving optimum results.

CUT STUMP APPLICATION

Woody vegetation may be controlled by treating freshly cut stumps of trees and resprouts with this product. Apply this product using suitable equipment to ensure coverage of the entire cambium. Cut vegetation close to the soil surface. **Apply a 50 to 100 percent solution of this product to the freshly-cut surface immediately after cutting.** Delay in application may result in reduced performance. For best results, make applications during periods of active growth and full leaf expansion.



When used according to directions for cut stump application, this product will control, partially control or suppress many types of woody brush and tree species, some of which are listed below:

Alder	Eucalyptus	Maple	Reed, Giant	Sycamore
<i>Alnus spp.</i>	<i>Eucalyptus spp.</i>	<i>Acer spp.</i>	<i>Arundo donax</i>	<i>Platanus occidentalis</i>
Coyote Brush	Hickory	Oak	Salt cedar	Tan Oak
<i>Baccharis consanguinea</i>	<i>Carya spp.</i>	<i>Quercus spp.</i>	<i>Tamarix spp.</i>	<i>Lithocarpus densiflorus</i>
Dogwood	Madrone	Poplar	Sweet gum	Willow
<i>Cornus spp.</i>	<i>Arbutus menziesii</i>	<i>Populus spp.</i>	<i>Liquidambar styraciflua</i>	<i>Salix spp.</i>

INJECTION AND FRILL APPLICATIONS

Woody vegetation may be controlled by injection or frill application of this product. Apply this product using suitable equipment which must penetrate into living tissue. Apply the equivalent of 1 ml of this product per 2 to 3 inches of trunk diameter. This is best achieved by applying 25 to 100 percent concentration of this product either to a continuous frill around the tree or as cuts evenly spaced around the tree below all branches. As tree diameter increases in size, better results are achieved by applying dilute material to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow runoff to occur from frill or cut areas in species that exude sap freely after frills or cutting. In species such as these, make frill or cut at an oblique angle so as to produce a cupping effect and use undiluted material. For best results, make applications during periods of active growth and full leaf expansion.

Control	Suppression
Oak	Black Gum*
Poplar	<i>Nyssa sylvatica</i>
Sweetgum	Cornus spp.
Sycamore	Carya spp.
	Acer rubrum

*This product is not approved for this use on this species in the state of California.

INJECTION METHOD FOR CONTROL OF JAPANESE KNOTWEED (*Polygonum cuspidatum*) & GIANT KNOTWEED (*Polygonum polystachyum*)

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling.

This label must be in the possession of the user at the time of application.

All applicable directions and precautions in the AquaNeat Herbicide label booklet must be followed.

See the "PRODUCT INFORMATION" and "MIXING AND APPLICATION INSTRUCTIONS" sections of this product's label booklet for essential product performance information.

This product may be used for control of Japanese knotweed and giant knotweed using individual stem treatment. Individual knotweed stems may be treated by injecting up to 5 ml of this product, undiluted directly into the hollow stem just below a node. Make a hole suitable for injecting the herbicide through both sides of the stem using an awl or other convenient pointed tool about 6 inches above the ground, just below a node. (Nodes are circular thickenings or scars surrounding the stem where leaves are or were previously attached.) The herbicide is then injected into this hole. Each stem of the knotweed plant must be treated.

This product can be injected using any injection device capable of delivering a 5 ml dose. For convenience and accuracy, a hand-operated injection device designed to deliver repeated pre-measured doses from a supply reservoir is recommended.

Commercially available dose measuring equipment may be adapted for this purpose. Calibrate the devise to deliver a dose of 5 ml per injection cycle. A sharpened hollow probe for puncturing the stem and delivery of the herbicide can also be integrated into the delivery system.

Restriction: Do not apply more than 7.5 quarts of this product per acre. At 5 ml per stem, 7.5 quarts is sufficient to treat a maximum of 1,420 stems per acre.

RELEASE OF BERMUDAGRASS OR BAHIAGRASS ON NONCROP SITES RELEASE OF DORMANT BERMUDAGRASS AND BAHIAGRASS

When applied as directed, this product will provide control or suppression of many winter annual weeds and tall fescue for effective release of dormant bermudagrass or bahiagrass. Make applications to dormant bermudagrass or bahiagrass.

For best results on winter annuals, treat when weeds are in an early growth stage (below 6 inches in height) after most have germinated. For best results on tall fescue, treat when fescue is in or beyond the 4- to 6-leaf stage.

WEEDS CONTROLLED

Rate for control or suppression of winter annuals and tall fescue are listed below.

Apply the specified rates of this product in 10 to 25 gallons of water per acre, plus 2 quarts nonionic surfactant per 100 gallons of total spray volume.



WEEDS CONTROLLED OR SUPPRESSED*

NOTE: C = Control
S = Suppression

WEED SPECIES	6	9	12	18	24	48
Barley, little <i>Hordeum pusillum</i>	S	C	C	C	C	C
Bedstraw, catchweed <i>Galium aparine</i>	S	C	C	C	C	C
Bluegrass, annual <i>Poa annua</i>	S	C	C	C	C	C
Chervil <i>Chaerophyllum temulum</i>	S	C	C	C	C	C
Chickweed, common <i>Stellaria media</i>	S	C	C	C	C	C
Clover, crimson <i>Trifolium incarnatum</i>	.	S	S	C	C	C
Clover, large hop <i>Trifolium campestre</i>	.	S	S	C	C	C
Speedwell, corn <i>Veronica arvensis</i>	S	C	C	C	C	C
Fescue, tall <i>Festuca arundinacea</i>	S	S
Geranium, Carolina <i>Geranium carolinianum</i>	.	.	S	S	C	C
Henbit <i>Lamium amplexicaule</i>	.	S	C	C	C	C
Ryegrass, Italian <i>Lolium multiflorum</i>	.	.	S	C	C	C
Vetch, common <i>Vicia sativa</i>	.	.	S	C	C	C

*These rates apply only to sites where an established competitive turf is present.

RELEASE OF ACTIVELY GROWING BERMUDAGRASS

NOTE: USE ONLY ON SITES WHERE BAHIAGRASS OR BERMUDAGRASS ARE DESIRED FOR GROUND COVER AND SOME TEMPORARY INJURY OR YELLOWING OF THE GRASSES CAN BE TOLERATED.

When applied as directed, this product will aid in the release of bermudagrass by providing control of annual species listed in the "WEEDS CONTROLLED" section in this label, and suppression or partial control of certain perennial weeds.

For control or suppression of those annual species listed in this label, use 3/4 to 2-1/4 pints of this product as a broadcast spray in 10 to 25 gallons of spray solution per acre, plus 2 quarts of a nonionic surfactant per 100 gallons of total spray volume. Use the lower rate when treating annual weeds below 6 inches in height (or length of runner in annual vines). Use the higher rate as size of plants increases or as they approach flower or seedhead formation.

Use the higher rate for partial control or longer-term suppression of the following perennial species. Use lower rates for shorter-term suppression of growth.

Bahiagrass Johnsongrass**
Dallisgrass Trumpetcreeper*
Fescue (tall) Vaseygrass

*Suppression at the higher rate only.

**Johnsongrass is controlled at the higher rate.

Use only on well-established bermudagrass. Bermudagrass injury may result from the treatment but regrowth will occur under moist conditions. Do not make repeat applications in the same season, since severe injury may result.

BAHIAGRASS SEEDHEAD AND VEGETATIVE SUPPRESSION

When applied as directed in the "NONCROP SITES" section in this label, this product will provide significant inhibition of seedhead emergence and will suppress vegetative growth for a period of approximately 45 days with single applications and approximately 120 days with sequential applications.

Apply this product 1 to 2 weeks after full green-up of bahiagrass or after the bahiagrass has been mowed to a uniform height of 3 to 4 inches. Applications must be made prior to seedhead emergence. Apply 5 fluid ounces per acre of this product, plus 2 quarts of an approved nonionic surfactant per 100 gallons of total spray volume in 10 to 25 gallons of water per acre.





Sequential applications of this product plus nonionic surfactant may be made at approximately 45-day intervals to extend the period of seedhead and vegetative growth suppression. For continued vegetative growth suppression, sequential applications must be made prior to seedhead emergence.

Apply no more than 2 sequential applications per year. As a first sequential application, apply 3 fluid ounces of this product per acre plus nonionic surfactant. A second sequential application of 2 to 3 fluid ounces per acre plus nonionic surfactant may be made approximately 45 days after the last application.

ANNUAL GRASS GROWTH SUPPRESSION

For growth suppression of some annual grasses, such as annual ryegrass, wild barley and wild oats growing in coarse turf on roadsides or other industrial areas, apply 3 to 4 ounces of this product in 10 to 40 gallons of spray solution per acre. Mix 2 quarts of a nonionic surfactant per 100 gallons of spray solution. Make application when annual grasses are actively growing and before the seedheads are in the boot stage of development. Treatments made after seedhead emergence may cause injury to the desired grasses.

AQUATIC SITES

When applied as directed and under the conditions described in the "WEEDS CONTROLLED" section in this label, this product will control or partially control the labeled weeds growing in aquatic sites.

Aquatic Sites - This product may be applied to emerged weeds in all bodies of fresh and brackish water which may be flowing, non-flowing or transient. This includes lakes, rivers, streams, ponds, estuaries, rice levees, seeps, irrigation and drainage ditches, canals, reservoirs, wastewater treatment facilities, wildlife habitat restoration and management areas, and similar sites.

Wetland Sites - This product may be used in and around water (aquatic areas) and wetlands found in forestry and in power, telephone and pipeline rights-of-way sites including where these sites are adjacent to or surrounding domestic water supply reservoirs, supply streams, lakes and ponds. Read and observe the following before making applications in and around water.

If aquatic sites are present in the noncrop area and are part of the intended treatment, read and observe the following directions:

This product does not control plants which are completely submerged or have a majority of their foliage under water.

There is no restriction on the use of treated water for irrigation, recreation or domestic purposes.

Consult local state fish and game agency and water control authorities before applying this product in, around and to public water. Permits may be required to treat such water.

Do not spray open bodies of water where woody brush, trees and herbaceous weeds do not exist. The maximum application rate of 3.75 quarts per acre must not be exceeded in a single over-water broadcast application except as follows, where any specified rate may be applied:

- Stream crossings in utility right-of-way.
- Where applications will result in less than 20 percent of the total water area being treated.

Restrictions: Do not apply this product directly to water within 1/2 mile up-stream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 1/2 mile of an active potable water intake in a standing body of water such as lake, pond or reservoir. To make aquatic applications around and within 1/2 mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 parts per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. This restriction does not apply to intermittent inadvertent overspray of water in terrestrial use sites.

For treatments after drawdown of water or in dry ditches, allow 7 or more days after treatment before reintroduction of water to achieve maximum weed control. Apply this product within 1 day after drawdown to ensure application to actively growing weeds. Floating Mats of vegetation may require retreatment. Avoid wash-off of sprayed foliage by spray boat or recreational boat backwash or by rainfall within 6 hours of application. Do not re-treat within 24 hours following the initial treatment.

Applications made to moving bodies of water must be made while traveling upstream to prevent concentration of this herbicide in water. When making any bankside applications, do not overlap more than 1 foot into open water. Do not spray in bodies of water where weeds do not exist.

Maximum Application Rate: Do not exceed 8 quarts per acre per year. The maximum application rate of 7-1/2 quarts per acre must not be exceeded in any single ground broadcast application or aerial broadcast application that is being made over water.

When emerged infestations require treatment of the total surface area of impounded water, treating the area in strips may avoid oxygen depletion due to decaying vegetation. Oxygen depletion may result in fish kill.





STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Do not store below 32°F or above 100°F. Store in original container in a well-ventilated area separately from fertilizer, feed, and food stuffs. Avoid cross-contamination with other pesticides.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

NOTE: This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size.

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.





WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT. If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV051215)

AquaNeat is a registered trademark of Nufarm, Inc.





AquaNeat®

Aquatic Herbicide

GROUP 9 HERBICIDE

FOR USE ON EMERGED AQUATIC WEEDS AND BRUSH IN AQUATIC SITES. FOR USE IN FORESTRY (INCLUDING WEED CONTROL IN CHRISTMAS TREE PLANTATIONS), PASTURES, RANGELANDS, RIGHTS-OF-WAY, HABITAT RESTORATION AREAS, NON-CROP AND OTHER LISTED APPLICATION SITES.

ACTIVE INGREDIENT:

Glyphosate, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt* 53.8%

OTHER INGREDIENTS: 46.2%

TOTAL: 100.0%

*Contains 648 grams per litre or 5.4 pounds per U.S. gallon of the active ingredient, glyphosate, in the form of its isopropylamine salt. Equivalent to 480 grams per litre or 4 pounds per U.S. gallon of the acid, glyphosate.

KEEP OUT OF REACH OF CHILDREN

CAUTION / PRECAUCION

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand the label, find someone to explain it to you in detail.)

SEE ATTACHED BOOKLET FOR COMPLETE PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTRAC (800) 424-9300

For Medical Emergencies Only, Call (877) 325-1840

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION / PRECAUCION

Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

FIRST AID

IF INHALED	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
-------------------	---

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Do not store below 32°F or above 100°F. Store in original container in a well-ventilated area separately from fertilizer, feed, and food stuffs. Avoid cross-contamination with other pesticides.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

(continued)

EPA Reg. No. 228-365
EPA Est. No. 228-IL-001

Manufactured for
Nufarm Americas Inc.
11901 S. Austin Avenue
Alsip, IL 60803

SAFETY DATA SHEET

Aquaneat Aquatic Herbicide



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Aquaneat Aquatic Herbicide
EPA Reg. No.: 228-365
Product Type: Herbicide
Company Name: Nufarm Americas Inc.
11901 S. Austin Avenue
Alsip, IL 60803
1-800-345-3330
Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300
For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. Regulatory Information for explanation.

2. HAZARDS IDENTIFICATION

PHYSICAL HAZARDS:

Not Hazardous

HEALTH HAZARDS:

Not Hazardous

ENVIRONMENTAL HAZARDS

Hazardous to aquatic environment, acute	Category 2
Hazardous to aquatic environment, chronic	Category 2

SIGNAL WORD

None

HAZARD STATEMENTS:

Toxic to aquatic life with long lasting effects.



PRECAUTIONARY STATEMENTS

Avoid release to the environment.

Collect spillage.

Dispose of contents in accordance with local, state, and federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS

N-(phosphonomethyl)glycine, Isopropylamine salt
Other Ingredients

CAS NO.

38641-94-0
Trade Secret

% BY WEIGHT

52.2 – 55.4
Trade Secret

Synonyms: Mixture containing Glyphosate IPA salt; N-(phosphonomethyl) glycine, in the form of its isopropylamine salt.

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

SAFETY DATA SHEET

Aquaneat Aquatic Herbicide

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

If on Skin or Clothing: Take off contaminated clothing. Wash with soap and water. Get medical attention if irritation develops and persists.

If Inhaled: Move person to fresh air. If symptoms develop, get medical advice.

If Swallowed: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. If symptoms develop, get medical advice.

Most Important symptoms/effects, acute and delayed: None expected. May cause mild eye irritation.

Indication of Immediate medical attention and special treatment if needed: None expected. For ingestion there is no specific antidote available. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later. This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as oxides of carbon, nitrogen, and phosphorous.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Handling:

Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Storage:

STORE ABOVE 32° F (0° C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, warm to 68° F (20° C) and mix well or recirculate to redissolve before using. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

SAFETY DATA SHEET

Aquaneat Aquatic Herbicide

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear goggles or safety glasses with front, brow and temple protection. Washing facilities should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves. Washing facilities should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	STEL	TWA	STEL	
Glyphosate IPA	NE	NE	NE	NE	
Other Ingredients	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear green or yellow tinted liquid
Odor:	Odorless
Odor threshold:	No data available
pH:	4.82 (1% dilution w/w in DIW @ 24° C)
Melting point/freezing point:	No data available
Initial boiling point and boiling range	No data available
Flash point:	Not applicable due to aqueous formulation
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits:	Not applicable
Vapor pressure:	No data available (mixture)
Vapor density:	No data available
Relative density:	1.21 g/mL @ 20° C
Solubility(ies):	No data available
Partition coefficient: n-octanol/water:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	67.9 cPs @ 20° C, 29.8 cPs @ 20° C
VOC Emission Potential (%):	0.00

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Corrosive to mild steel, reaction with galvanized steel or unlined steel may produce hydrogen gas.

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Will not occur.

Conditions to Avoid: Excessive heat. Do not store near heat or flame.

Incompatible Materials: This product reacts with galvanized steel or unlined steel (except stainless steel) to produce hydrogen gas that may form a highly combustible gas mixture which could flash or explode.

Hazardous Decomposition Products: Under fire conditions, may produce gases such as oxides of carbon, nitrogen and phosphorous.

SAFETY DATA SHEET

Aquaneat Aquatic Herbicide

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact

Symptoms of Exposure: Minimally irritating to the eye based on toxicity studies. Slightly toxic and non-irritating to the skin based on toxicity studies. Low inhalation toxicity. Inhalation of mists may cause coughing and sneezing. Slightly toxic if ingested based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

Delayed, immediate and chronic effects of exposure: None known

Toxicological Data:

Data from laboratory studies on this product are summarized below:

Oral: Rat LD₅₀: >5,000 mg/kg

Dermal: Rat LD₅₀: >5,000 mg/kg

Inhalation: Rat 4-hr LC₅₀: >2.07 mg/l (no mortality at highest dose tested)

Eye Irritation: Rabbit: Minimally irritating

Skin Irritation: Rabbit: Non-irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to glyphosate may decrease body weight gains and effects to liver.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to glyphosate may cause effects to the liver. EPA has given glyphosate a Group E classification (evidence of non-carcinogenicity in humans). Canada PMRA has classified glyphosate as non-carcinogenic. In 2015, IARC classified glyphosate as a probable human carcinogen Group 2A based on limited human evidence and some evidence in animals.

Reproductive Toxicity: In laboratory animal studies with glyphosate, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

Developmental Toxicity: In animal studies, glyphosate did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

Genotoxicity: Glyphosate has produced no genetic changes in a variety of standard tests using animals and animal or bacterial cells.

ASSESSMENT CARCINOGENICITY:

Component	Regulatory Agency Listing As Carcinogen			
	ACGIH	IARC	NTP	OSHA
Glyphosate IPA Salt	No	2A	No	No
Other Ingredients	No	No	No	No

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Glyphosate IPA

96-hour LC ₅₀ Rainbow Trout:	>1000 mg/l
48-hour EC ₅₀ Daphnia:	930 mg/l
72-hour ErC ₅₀ Algae:	166 mg/l

Data on Glyphosate Acid:

96-hour LC ₅₀ Bluegill:	120 mg/l	Bobwhite Quail Acute Oral LD ₅₀ :	>3,851 mg/kg
96-hour LC ₅₀ Rainbow Trout:	786 mg/l	Bobwhite Quail 5-day Dietary LC ₅₀ :	>4,640 ppm
48-hour EC ₅₀ Daphnia:	780 mg/l	Mallard Duck 5-day Dietary LC ₅₀ :	>4,640 ppm
96-hour EC ₅₀ Diatoms:	1.3 mg/l		
14-day EC ₅₀ Duckweed:	25.5 mg/l		
72-hour EC ₅₀ Algae:	450 mg/l		

Environmental Fate:

In the environment glyphosate adsorbs strongly to soil and is expected to be immobile in soil. Glyphosate is readily degraded by soil microbes to AMPA (aminomethyl phosphonic acid) that is further degraded to carbon dioxide. Glyphosate and AMPA are unlikely to enter ground water due to their strong adsorptive characteristics. Terrestrially-applied glyphosate has the potential to move into surface waters through soil erosion because it may be adsorbed to soil particles suspended in the runoff. Aquatic applications registered for certain formulations may also result in glyphosate entering surface waters. Complete degradation is slow, but dissipation in water is rapid because glyphosate is bound in sediments and has low biological availability to aquatic organisms. These

SAFETY DATA SHEET

Aquaneat Aquatic Herbicide

characteristics suggest a low potential for bioconcentration in aquatic organisms and this has been verified by laboratory investigations of glyphosate bioconcentration in numerous marine and freshwater organisms with and without soil. The maximum whole body bioconcentration factors for fish were observed to be less than 1X. Bioconcentration factors for sediment dwelling mollusks and crayfish tended to be slightly higher, but were always less than 10X. In addition, any residues accumulated in organisms were rapidly eliminated.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Wastes resulting from use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state or local procedures. Emptied container retains vapors and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Container Handling and Disposal:

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. If practical, agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this MSDS.

DOT:

Non Regulated

IMDG:

Non Regulated

IATA:

Non Regulated

15. REGULATORY INFORMATION

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

SAFETY DATA SHEET

Aquaneat Aquatic Herbicide

Caution. Harmful if inhaled. Avoid breathing spray mist. Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling.

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Not Hazardous

Section 313 Toxic Chemical(s):

None

Reportable Quantity (RQ) under U.S. CERCLA:

None

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65:  **ATTENTION.** This product can expose you to chemicals including glyphosate which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 1 Flammability: 0 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

Date of Issue: January 25, 2018

Supersedes: May 15, 2015

ACCEPTED
VIA NOTIFICATION
LABEL NOT REVIEWED

Doc id: 531470

May 16, 2012

New York State Department
of Environmental Conservation
Division of Materials Management
Pesticide Product Registration

Classified for
"RESTRICTED USE"
in New York State
under 6NYCRR Part 326

Nufarm
Diquat SPC 2 L

Landscape and Aquatic Herbicide

To prevent accidental poisoning, never put this product into food, drink, or other containers. Use this product strictly in accordance with the directions on this label.

ACTIVE INGREDIENT:

Diquat dibromide [6,7-dihydrodipyrido(1,2-a:2',1'-c) pyrazinediium dibromide] 37.3%

OTHER INGREDIENTS: 62.7%

TOTAL: 100.0%

Contains 2 lbs. diquat cation per gallon (3.73 lbs. of diquat dibromide per gallon).

KEEP OUT OF REACH OF CHILDREN
CAUTION / PRECAUCIÓN

See inside label booklet for FIRST AID and additional PRECAUTIONARY STATEMENTS

For Chemical Spill, Leak,
Fire, or Exposure,
Call CHEMTREC
(800) 424-9300.
For Medical
Emergencies Only,
Call (877) 325-1840.

EPA REG. NO. 228-675
EPA EST. NO. 070815-GA-001

MADE IN CHINA



7 36211 75996 2

**Net Contents
2.5 Gal.
(9.46 L)**

Manufactured for
Nufarm Americas Inc.
150 Harvester Drive
Burr Ridge, IL 60527



PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION/PRECAUCION

Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber ≥ 14 mils, and nitrile rubber ≥ 14 mils. If you want more options, follow the instructions for Category A on an EPA chemical-resistant category selection chart.

Mixers, Loaders, Applicators and other handlers must wear:

- Coveralls over short-sleeved shirt and short pants or coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing, or loading
- Face shield when mixing or loading

Exception: After this product has been diluted to 0.50% or less in water (i.e., the labeled rate for some spot applications), applicators for AQUATIC SURFACE APPLICATIONS must, at a minimum, wear (Note – Mixers and Loaders for this application method must still wear the personal protective equipment (PPE) as described in the above section):

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves
- Protective eyewear

Exception: At a minimum, applicators for AQUATIC SUBSURFACE APPLICATIONS must wear (Note – Mixers and Loaders for this application method must still wear the personal protective equipment (PPE) as described in the above section):

- Short-sleeved shirt and short pants
- Waterproof gloves
- Chemical-resistant footwear plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering Control Statements

Mixers and loaders supporting aerial applications are required to use closed systems that provide dermal protection. The closed system must be used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)]. When using the closed system, mixers and loaders' PPE requirements may be reduced or modified as specified in the WPS.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

FIRST AID

IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by the poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 to 20 minutes.• Call a poison control center or doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.• Call a poison control center or doctor for further treatment advice.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.

NOTE TO PHYSICIAN

To be effective, treatment for diquat poisoning must begin IMMEDIATELY. Treatment consists of binding diquat in the gut with suspensions of activated charcoal or bentonite clay, administration of cathartics to enhance elimination, and removal of diquat from the blood by charcoal hemoperfusion or continuous hemodialysis.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to aquatic invertebrates.

For Terrestrial Uses, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water.

For Aquatic Uses, do not apply directly to water except as specified on this label.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

Do not apply this product through any type of irrigation system.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over short-sleeved shirt and short pants, or coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material
- Chemical-resistant footwear plus socks
- Protective eyewear
- Chemical-resistant headgear for overhead exposure

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep all unprotected persons out of operating areas or vicinity where there may be drift.

For terrestrial uses, do not enter or allow entry of maintenance workers into treated areas, or allow contact with treated vegetation wet with spray, dew, or rain, without appropriate protective clothing until spray has dried.

For aquatic uses, do not enter treated areas while treatments are in progress.

SPECIFIC USE DIRECTIONS

This product is a herbicide used to control weeds in the following sites:

- aquatic areas
- commercial greenhouses and nurseries
- dormant established turfgrass (bermudagrass, zoysiagrass – nonfood or feed crop)
- landscape, industrial, recreational, commercial, residential, and public areas
- ornamental seed crops (flowers, bulbs, etc. – excluding the state of California)
- turf renovation (all turf areas except commercial sod farms)

This product works by being absorbed by the weed, and, within a few days, the weed shows signs of dying. Optimum results are seen if the weeds are young, actively growing, and free from stress.

To avoid injury to desired crops, ornamentals or desirable plants, use caution to prevent drift during application and clean all spray equipment thoroughly with water after use. Avoid application to muddy water or disturbing the water during application that reduce weed control. To avoid reduced herbicidal activity, do not use dirty or muddy water in preparing spray solutions of this product. Avoid application under conditions of high wind, water flow, or wave action.

Do not allow sprays to come in contact with or drift to, foliage of ornamental plants or food crops.

Do not graze livestock on treated turf or feed treated thatch to livestock.

SPRAY DRIFT MANAGEMENT

Avoiding spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment-and-weather related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations:

- The distance of the outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
- Nozzles must always point backward parallel with the airstream and never be pointed downward more than 45 degrees.

Where states have more stringent regulations, they must be observed.

DROPLET SIZE: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (**see Wind, Temperature and Humidity, and Temperature Inversions sections of this label**).

CONTROLLING DROPLET SIZE:

Volume – Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.

Pressure – Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage.

Nozzle Orientation – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations. Significant deflection from horizontal will reduce droplet size and increase drift potential.

Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH: For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length that further reduces drift without reducing swath width.

APPLICATION HEIGHT: Make applications at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT: When applications are made with a crosswind, the swath will be displaced downwind. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase swath adjustment distance with increasing drift potential (higher wind, smaller droplets, etc.).

WIND: Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given speed. Avoid applications below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS: Do not make applications during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates, indicates good vertical air mixing.

SENSITIVE AREAS: Apply the pesticide when the wind is blowing away from adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops).

AQUATIC AND NONCROP USES

New York – Not for Sale or Use in New York State without Supplemental Special Local Needs Labeling.

This product is used to control aquatic weeds in **public waters** such as ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, streams, rivers, and other slow-moving or quiescent bodies of water. Do not apply to water that is moving or if outflow leads to public waters (i.e., apply only to still water ponds, lakes and drainage ditches).

Optimum control of submersed weeds is obtained by applying this product when the weeds are actively growing (photosynthesizing), typically when water temperatures are about 50°F or more (this occurs usually in the Spring or early Summer).

Precautions and Restrictions:

- Obtain all necessary approval and/or permits before application if required. Consult the responsible state agencies (i.e., Fish and Game Agencies, State Water Conservation authorities, or Department of Natural Resources).
- Apply this product by those applicators certified for aquatic pest control authorized by the State or local government, Federal or State public agencies such as Water Management District personnel and municipal officials, and by Corps of Engineers.
- For water bodies containing dense weeds, apply this product to only 1/3 to 1/2 of the water body area at one time. If a repeat application is required, wait for 14 days. Using this product in this manner will prevent loss of oxygen in the water body which occurs when dead weeds begin to decompose which often leads to suffocation of fish.
- Do not apply this product in areas where commercial processing of fish which produces fish protein concentrate or fish meal is practiced. Prior to application, coordinate application with and obtain approval from local and/or State authorities.
- Use water treated with this product only after the specified number of days have passed after application (refer to the table below for these water use restrictions). Alternatively, use the water at a different time after application only if an approved assay (ex. PAM II Spectrometric Method) shows that no more than the designated maximum contaminant level goal (MCLG) of 0.02 mg/L (ppm) of diquat dibromide (calculated as the cation) is present in the water.
- If posting is required by your State or Tribe, consult the agency responsible for pesticide regulations for specific details.

Water Use Restrictions Following Applications

TYPE OF WATER	Number of Days to Wait Before Using Water After An Application At Different Application Rates				
	2 gals./ surface acre	1 gal./ surface acre	0.75 gal./ surface acre	0.50 gal./ surface acre	Spot Spray (<0.5 gal./ surface acre)†
Drinking	3 days	2 days	2 days	1 day	1 day
Fishing and Swimming	0	0	0	0	0
Livestock/Domestic Animals Consumption	1 day	1 day	1 day	1 day	1 day
Spray Tank Applications†† and Irrigation to Turf and Landscape Ornamentals	3 days	2 days	2 days	1 day	1 day

TYPE OF WATER	Number of Days to Wait Before Using Water After An Application At Different Application Rates				
	2 gals./surface acre	1 gal./surface acre	0.75 gal./surface acre	0.50 gal./surface acre	Spot Spray (<0.5 gal./surface acre)†
Spray Tank Applications†† and Irrigation to Food Crops and Production Ornamentals	5 days	5 days	5 days	5 days	5 days

†Apply this product in addition to the manufacturer's specified rate of a nonionic surfactant (contains 75% or greater nonionic surfactant).
 ††Do not use water treated with this product to prepare sprays to be applied to food crops, turf or ornamentals until the appropriate time period has elapsed or injury to crop, turf or plants could occur.
Note: If more than one spray tank is required to complete a single aquatic application, there is no water restriction between the consecutive spray tank applications.

Control of Floating and Marginal Weeds

This product controls the listed floating and marginal weeds from application by airboat, airplane, backpack, spray handgun, helicopter, or similar application equipment. For all application methods, ensure that weeds received thorough spray coverage.

Floating and Marginal Weeds Controlled
Water lettuce, <i>Pistia stratiotes</i>
Water hyacinth, <i>Eichhornia crassipes</i>
Duckweed, <i>Lemna</i> spp.
Salvinia spp. (including <i>S. molesta</i>)
Pennywort (<i>Hydrocotyle</i> spp.)
Frog's bit, <i>Limnobium spongia</i> †
Cattails, <i>Typha</i> spp.

†Not registered for use in California

Spot Treatment:

Application Rates: 2 quarts of this product per 100 gallons spray carrier (0.5% solution) **plus** 0.25 to 1.0% v/v (1 quart to 1 gallon per 100 gallons water) of an approved aquatic wetting agent.

For cattail control: Apply this product before flowering at 8 quarts of this product/100 gallons spray carrier (the maximum application rate) plus the wetting agent. Make repeat applications if needed for complete control.

Application Directions: Apply spray solutions to wet completely the target weeds. Do not spray to runoff. Make additional applications if treating densely-packed weeds or mats. Best results are obtained for weed escapes if repeat applications are made within 2 weeks of the first treatment.

Broadcast Treatment:

Application Rates: 0.5 to 2.0 gallons of this product per surface acre in sufficient spray carrier **plus** 16 to 32 oz. per acre of an approved aquatic wetting agent.

For duckweed control: Apply this product at 1-2 gallons/A.

Application Directions: Apply sprays to ensure thorough target weed coverage. Repeat applications as necessary for densely populated weed areas.

Control of Submerged Weeds

This product controls the listed submerged weeds from application by surface, subsurface, and bottom placement applications. Enhanced weed control are obtained in situations where severe weed or algae infestations are found: use an approved algaecide either as a pretreatment to an application of this product, or as a tank mix with this product.

Submersed Weeds Controlled or Suppressed
Bladderwort, <i>Utricularia</i> spp.
Hydrilla, <i>Hydrilla verticillata</i>
Watermilfoils (including Eurasian), <i>Myriophyllum</i> spp.
Pondweeds, <i>Potamogeton</i> spp. [†]
Coontail, <i>Ceratophyllum demersum</i>
Elodea, <i>Elodea</i> spp.
Brazilian Elodea, <i>Egeria densa</i>
Naiad, <i>Najas</i> spp.
Algae, <i>Spirogyra</i> spp. and <i>Pithophora</i> spp. ^{††}

[†]This product does not control Richardson's pondweed, *P. richardsonii*.

^{††}Suppression only. *Spirogyra* and/or *Pithophora*, can be controlled using a tank mix of this product with an approved algaecide.

Application Rates: 0.5 to 2.0 gallons of this product in water per surface acre (per 4-foot water depth). For severe weed infestations, use the 2.0 gallon per surface acre rate. Repeat applications at 14- to 21- day intervals are needed for optimum control.

Use the table below to determine the number of gallons of this product needed to apply per surface acre based on water depth.

	Gallons of Product per Surface Acre			
	Average Water Depth			
	1 Foot	2 Feet	3 Feet	4 Feet
1 gallon/acre rate	0.25 gal.	0.50 gal.	0.75 gal.	1.0 gal.
2 gallon/acre rate	0.50 gal.	1.0 gal.	1.5 gals.	2.0 gals.

Note: For water depths of 2 feet or less including shorelines, do not exceed 1 gallon per surface acre.

Application Directions

Subsurface Applications: For submersed weeds, especially *Hydrilla*, that have reached the water's surface, apply this product in a water carrier or an invert emulsion through boom trailing hoses carrying nozzle tips that direct the dilute spray below the water surface to ensure adequate weed coverage.

Bottom Placement: For submersed weeds (ex. *Hydrilla*, Bladderwort, or Coontail) that have reached the water surface and/or where the water is slowly moving through the weed growth, apply this product in an invert emulsion carrier with weighted hoses that injects the diluted spray solution near the bottom. Adding a copper-based algaecide improves control. Alternatively, a pretreatment application with a copper based algaecide improves overall control if algae are present along with submersed weeds.

Surface Application for Submersed Aquatic Weeds: For submersed weeds, apply this product as a spray in sufficient carrier to fully cover the target area and to ensure complete coverage of the weed areas. Use the higher rate for mixed weed populations. Do not use surface spray applications for densely-packed submersed weeds or if water is over 2 feet deep (use subsurface applications of this product in these situations).

COMMERCIAL GREENHOUSES AND NURSERIES

Use this product for general weed control in commercial greenhouses (ex., beneath benches), for field grown and container stock, and in other similar areas. Make applications of this product preplant or postplant preemergence in field grown ornamental nursery plantings, or postemergence as a directed spray. For ornamental seed crops (NOT registered for use in the State of California), apply this product preemergence. Do not allow sprays to contact desirable foliage or injury will occur. Do not use on food or feed crops.

Spot Spray Application Rates: 1 to 2 qts. of this product **plus** a nonionic surfactant (contains 75% or greater nonionic surfactant) at the manufacturer's specified rate per 100 gals of water, or 0.75 oz. (22 ml) of this product plus the manufacturer's specified rate of a nonionic surfactant (contains 75% or greater nonionic surfactant) per 1 gallon of water.

Broadcast Application Rates: 1 to 2 pts. of this product in a minimum of 15 gallons of water per acre **plus** a nonionic surfactant (contains 75% or greater nonionic surfactant) at the manufacturer's specified rate per 100 gals of spray mixture. For thorough coverage, apply this product in an adequate spray volume.

DORMANT ESTABLISHED TURFGRASS (BERMUDAGRASS, ZOYSIAGRASS)

NONFOOD OR FEED CROP

This product controls the listed emerged annual broadleaf and grass weeds in established dormant bermudagrass lawns, parks, golf courses, etc. Do not apply unless turfgrass is dormant at application. Application to actively growing bermudagrass causes delay or permanent injury. If using this product in extreme Southern areas of the U.S., make certain that the turfgrass is dormant at the time of application.

Weeds Controlled in Established Dormant Turfgrass
Little Barley†
Annual Bluegrass
Bromes including Rescuergrass, Sixweeks fescue, Henbit, Buttercup, and Carolina Geranium

†Apply this product before the mid-boot stage.

Broadcast (Ground) Application Rates: 1 to 2 pts. of this product per acre in 20 to 100 gals. of spray mix **plus** a nonionic surfactant (contains 75% or greater nonionic surfactant) at the manufacturer's specified rate per 100 gals. of spray mixture.

LANDSCAPE, INDUSTRIAL, RECREATIONAL, COMMERCIAL, RESIDENTIAL, AND PUBLIC AREAS

This product is a non-selective herbicide and it will kill broadleaf and grassy weeds in industrial, recreational, golf course, commercial, residential, and public areas within 24 to 36 hours. Do not allow sprays to contact desirable plant foliage or injury will occur.

To be effective as a contact/desiccant herbicide, this product must completely cover the target weeds. Best results are seen when this product is applied to young, actively growing weeds. Do not apply to weeds that are growing under stress. Use the specified application techniques for acceptable weed control.

For weeds that are difficult to control, such as perennial, or deeply-rooted weeds, control is often obtained by applications of this product as a tank mix with other systemic-type herbicides. This product, when applied as a tank-mix with a preemergent herbicide labeled for the intended use site, will provide residual control. Before preparing large volume of a tank-mix of this product with other herbicides, check that the tank-mix is physically compatible by mixing only a small amount of the tank mix. If the mixture balls up, forms flakes, sludges, jells, oily films or layers, or other precipitates, do not use this combination: it is not compatible. Read and follow the other product labels for specific application directions.

It is not possible for Nufarm to test all possible tank mixtures of this product with other pesticides for compatibility, efficacy, or other adverse effects. Consult your state experimental station, state university or extension agent before tank-mixing this product with other herbicides.

Grounds maintenance weed control in public, commercial and residential landscapes, including landscape beds, lawns, golf courses and roadsides: Apply this product as a spot or broadcast spray to control weeds in listed sites or to control weeds around the edges and non-flooded portions of ponds, lakes and ditches.

Trim and Edge weed control along driveways, walkways, patios, cart paths, fence lines, and around trees, ornamental gardens, buildings, other structures, and beneath non-commercial greenhouse benches: This product can be used to eliminate undesired grass and broadleaf plant growth in narrow-banded areas along the areas listed.

Since this product does not translocate systemically, it can be used as an edging or pruning tool. This product must be applied only to the select, narrow-banded areas of grass or undesirable weed growth found in desirable ornamental bedding plants, ground covers, etc. This product will only control vegetation growing within the width of the spray application. Do not exceed the labeled rate of this product or concrete-based materials will be stained.

Industrial weed control for right-of-ways, railroad beds/yards, highways, roads, dividers and medians, parking lots, pipelines, pumping stations, public utility lines, transformer stations and substations, electric utilities, storage yards, and other non-crop areas: Apply this product as a spot or broadcast spray either alone or in combination with other herbicides for a fast burndown of weeds in listed industrial weed control sites.

Spot Spray Applications: 1 to 2 qts. of this product *plus* a nonionic surfactant (contains 75% or greater nonionic surfactant) at the manufacturer's specified rate per 100 gals. water. For small spray solution volumes, mix 0.75 oz. (22 ml) this product with the appropriate amount of the nonionic surfactant in 1 gallon of water.

Broadcast Applications: 1 to 2 pts. of this product per acre *plus* a nonionic surfactant (contains 75% or greater nonionic surfactant) at the manufacturer's specified rate per 100 gals. of spray mixture. Use sufficient water to ensure good spray coverage, although increased spray volumes (60 gals. or more) will be necessary for treating tall and/or dense target plants.

ORNAMENTAL SEED CROPS (FLOWERS, BULBS, ETC.) (NOT REGISTERED FOR USE IN THE STATE OF CALIFORNIA)

This product can be used for preharvest desiccation of ornamental seed crops. DO NOT USE FOR FOOD OR FIBER CROPS.

Broadcast (Air or Ground) Applications: 1.5 to 2 pts. of this product *plus* a nonionic surfactant (contains 75% or greater nonionic surfactant) at the manufacturer's specified rate per acre. Apply in sufficient amount of water (minimum of 5 gallons by air; 15 gallons by ground) to ensure desiccation and weed burndown. Make repeat applications at a minimum of 5-day intervals and do not apply more than three applications. Do not use seed, screenings, or waste as feed or for consumption.

TURF RENOVATION (ALL TURF AREAS EXCEPT COMMERCIAL SOD FARMS)

This product is used to desiccate golf course turf and other turf areas prior to renovation. For suppression of regrowth and quick desiccation of treated turfgrass, use this product as a tank mix with other systemic non-selective or systemic postemergence grassy weed herbicides. Before tank mixing with other products, read and follow the other product labels for specific application directions and restrictions.

Broadcast (Ground) Application: 1 to 2 pts. of this product per acre *plus* a nonionic surfactant (contains 75% or greater nonionic surfactant) at the manufacturer's specified rate in 20 to 100 gals. of water. For smaller spray solution volumes, mix 4 teaspoons of this product and the appropriate amount of nonionic surfactant in 1 gal. of water. Apply this product as a full coverage spray to thoroughly contact the turfgrass. Make applications only when the turf is dry, free from dew or other moisture. Increased water volumes (100 gal. of water per acre) will enhance turf desiccation, especially when turfgrass is dense and thick.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Do not contaminate feed, foodstuffs, or drinking water. Do not store or transport near feed or food. Store at temperatures above 32°F.

PESTICIDE DISPOSAL: Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL:

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE MANNER OF USE OR APPLICATION, INCLUDING WEATHER, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

(RV051911)

Nufarm Diquat SPC 2 L Herbicide is not manufactured or distributed by Syngenta, seller of Reglone® and Reward®.

Reglone® and Reward® are trademarks of a Syngenta Group Company.



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nufarm Diquat SPC 2L
EPA Reg. No.: 228-675
Product Type: Manufacturing Use Product for Formulating Use Only - Herbicide
Company Name: Nufarm Americas Inc.
11901 S. Austin Avenue
Alsip, IL 60803
1-800-345-3330

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
Call CHEMTREC Day or Night: 1-800-424-9300
For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. HAZARDS IDENTIFICATION

PHYSICAL HAZARDS:

Corrosive to metals Category 1

HEALTH HAZARDS:

Acute toxicity, oral	Category 4
Acute toxicity, inhalation	Category 3
Eye Damage/Irritation	Category 2B
Skin irritation	Category 2
Specific target organ toxicity – Repeated exposure	Category 2

ENVIRONMENTAL HAZARDS:

Hazardous to aquatic environment, acute Category 3

SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

May be corrosive to metals. Harmful if swallowed. Causes eye irritation. Toxic if inhaled. May cause damage to organs through prolonged or repeated exposure



PRECAUTIONARY STATEMENTS

Keep in original container. Do not breathe mist, vapors, spray. Wash hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

IF SWALLOWED: Call a poison control center or doctor if you feel unwell. Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.

Absorb spillage to prevent material damage. Store locked up. Store in corrosive resistant, plastic-lined steel, stainless steel or fiberglass container.

Dispose of contents and container in accordance with local regulations.

SAFETY DATA SHEET

Nufarm Diquat SPC 2L

Other Hazard Statements: Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS

Diquat Dibromide
Other Ingredients

CAS NO.

85-00-7

Trade Secret

% BY WEIGHT

36.2 – 38.4

Trade Secret

Synonyms:

Mixture containing Diquat Dibromide; 6,7-dihydrodipyrdo (1,2-a:2',1'-c) pyrazinediium dibromide

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Most Important symptoms/effects, acute and delayed: Eye irritation.

Indication of Immediate medical attention and special treatment if needed: None expected. For ingestion there is no specific antidote available. Treatment for ingestion of this product must begin immediately. Treatment consists of binding the active ingredient, diquat, in the gut with suspensions of activated charcoal or bentonite clay, administration of cathartics to enhance elimination and removal of diquat from the blood by charcoal hemoperfusion or continuous hemodialysis.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.

Special Fire Fighting Procedures: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire, contain runoff, using dikes to prevent contamination of water supplies. Dispose of fire control water later.

Hazardous Decomposition Materials (Under Fire Conditions): May produce oxides of carbon and nitrogen and fumes of bromide.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE**HANDLING:**

This product reacts with aluminum to produce flammable hydrogen gas. Do not mix or store in containers or systems made of aluminum or having aluminum fittings.

Avoid breathing mist, vapors, spray. Avoid contact with eyes or clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE:

Store in original container. Do not put concentrate or dilute into food or drink containers. Store at temperatures above 32° C. Do not store or transport near food or feed. Do not store near fertilizers, seeds, insecticides, or fungicides. Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering Controls:**

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long-sleeved shirt and long pants, shoes, socks, and gloves. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

Component	OSHA		ACGIH		Unit
	TWA	C	TWA	STEL	
Diquat dibromide	NE	NE	0.5 (I) (Skin) 0.1(R) (Skin)	NE	mg/m ³
Other Ingredients	NE	NE	NE	NE	

I = Inhalable Fraction

R = Respirable Fraction

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Dark brown liquid
Odor:	Odorless
Odor threshold:	No data available
pH:	5.962 (1% w/w dilution in DIW)
Melting point/freezing point:	325° C
Initial boiling point and boiling range	No data available
Flash point:	Not applicable due to aqueous formulation
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	1.20 g/ml @ 20° C
Solubility(ies):	No data available

SAFETY DATA SHEET

Nufarm Diquat SPC 2L

Partition coefficient: n-octanol/water:

No data available

Autoignition temperature:

No data available

Decomposition temperature:

No data available

Viscosity:

1.626 mPa.s @ 20° C; 1.0858mPa.s @ 40 ° C

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Reacts with aluminum to produce flammable hydrogen gas. Do not store or allow this product to contact galvanized steel or unlined steel (except stainless steel) containers. This product reacts with such containers to produce hydrogen gas which may form a highly combustible mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Chemical Stability: This material is stable under normal handling and storage conditions.

Possible Hazardous Reactions: This product reacts with aluminum, galvanized steel and unlined steel containers (except stainless steel) to produce hydrogen gas which may form a highly combustible mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

Conditions to Avoid: Do not store in aluminum, galvanized or unlined metal containers (except stainless steel). Excessive heat and open flame.

Incompatible Materials: Corrosive to aluminum. Strong alkalis, anionic wetting agents and oxidizing agents.

Hazardous Decomposition Products: Under fire conditions may produce oxides of carbon and nitrogen and fumes of bromide.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact

Symptoms of Exposure:

Eye Contact: Mildly irritating based on toxicity studies.

Skin Contact: Slightly toxic and slightly irritating based on toxicity studies.

Ingestion: Moderately toxic based on toxicity studies.

Inhalation: Moderately toxic based on toxicity studies.

Delayed, immediate and chronic effects of exposure: Causes eye irritation. Causes skin irritation. May cause respiratory irritation. Causes damage to organs (liver, kidney) through prolonged or repeated exposure.

Toxicological Data:

Data from laboratory studies conducted on a similar, but not identical, formulation:

Oral: Rat LD₅₀: 886 mg/kg (female)

Dermal: Rat LD₅₀: >5,050 mg/kg

Inhalation: Rat 4-hr LC₅₀: 0.62 mg/L

Eye Irritation: Rabbit: Mildly irritating

Skin Irritation: Rabbit: Slightly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to diquat dibromide may cause effects to skin, lungs, liver and kidneys.

Carcinogenicity / Chronic Health Effects: Prolonged overexposure to diquat dibromide may cause effects to eyes (cataracts) and kidneys. There was no evidence of carcinogenicity in animal studies using diquat dibromide.

Reproductive Toxicity: Animal tests with diquat dibromide have not demonstrated reproductive effects.

Developmental Toxicity: Animal studies on diquat dibromide resulted in decreased fetal body weight, kidney and skeletal effects at doses that were also toxic to mother animals.

Genotoxicity: No evidence of mutagenicity in *in vivo* assays using diquat dibromide.

Assessment Carcinogenicity: None listed with ACGIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Diquat dibromide:

Bluegill 96-hour LC₅₀:

13.9 ppm

Bobwhite Quail 8-day Dietary LC₅₀:

106 ppm

SAFETY DATA SHEET

Nufarm Diquat SPC 2L

Rainbow Trout 96-hour LC₅₀: 14.8 ppm
Daphnia 48-hour EC₅₀: 0.77-1.19 ppm

Mallard Duck 8-day Dietary LC₅₀: 980 ppm
Honey Bee LC₅₀: 47-100 µg/bee

Environmental Fate:

Diquat dibromide's primary route of environmental dissipation is strong adsorption to soil particles, aquatic sediments or suspended particulates, which typically have a large excess of binding capacity. The strong chemical bonds formed by diquat absorption to soil particles make the herbicide biologically unavailable to terrestrial or aquatic organisms. Diquat does not hydrolyze or photodegrade and is resistant to microbial degradation under aerobic and anaerobic conditions.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

This product is acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Handling and Disposal:

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this SDS.

DOT

< 268 gallons per completed package:

UN 2927, TOXIC LIQUID, CORROSIVE, ORGANIC, n.o.s
(DIQUAT DIBROMIDE), 6.1, (8), II

≥ 268 gallons per completed package:

UN 2927, TOXIC LIQUID, CORROSIVE, ORGANIC, n.o.s

SAFETY DATA SHEET

Nufarm Diquat SPC 2L

(DIQUAT DIBROMIDE), 6.1, (8), II, RQ

IMDG

UN 2927, TOXIC LIQUID, CORROSIVE, ORGANIC, n.o.s
(DIQUAT DIBROMIDE), 6.1, (8), II, MARINE POLLUTANT

IATA

UN 2927, TOXIC LIQUID, CORROSIVE, ORGANIC, n.o.s
(DIQUAT DIBROMIDE), 6.1, (8), II

15. REGULATORY INFORMATION

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION. Harmful if inhaled. Harmful if swallowed. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with eyes or clothing.

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):

Immediate and Delayed

Section 313 Toxic Chemical(s):

None

Reportable Quantity (RQ) under U.S. CERCLA:

Diquat (CAS No. 85-00-7) 1,000 pounds

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas

SAFETY DATA SHEET**Nufarm Diquat SPC 2L**

Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

Date of Issue: April 7, 2015**Supersedes:**

February 21, 2014



EsplAnade® 200 SC

Preemergent Herbicide for the Control of Annual Grasses and Broadleaf Weeds in Non-Residential Non-Crop Areas, Railroad and Rail Yards, Managed Roadsides, Fence Rows, Utilities, Hardscapes, Industrial, Municipal, and Government Sites, and for the Release or Restoration of Desirable Vegetation in Parks and Open Space, Wildlife Management Areas, Recreational Areas, Fire Rehabilitation Areas, Prairies and Fire breaks.

ACTIVE INGREDIENT:

Indaziflam (CAS No: 730979-19-8) 19.05%

OTHER INGREDIENTS: 80.95%

TOTAL: 100.00%

EPA Reg. No. 432-1516

Contains 1.67 pounds of indaziflam per gallon

KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL and TRANSPORTATION Emergencies **ONLY** Call 24 Hours A Day
1-800-334-7577

For PRODUCT USE Information Call 1-800-331-2867

See Booklet for Complete Precautionary Statements and Directions for Use.

FIRST AID

If swallowed:	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
If on skin:	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<p>For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577</p> <p>Have the product container or label with you when calling a poison control center or doctor or going for treatment.</p>	

Nonrefillable Container

Net Contents

2.5 Gallons

80878486

61380637B 160503AV1

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. All mixers, loaders, applicators and other handlers must wear long-sleeved shirt, long pants, shoes plus socks, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of rinsate or washwater. This product may impact water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential of this product entering water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This pesticide may impact water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read the entire label before using this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

SHAKE CONTAINER WELL BEFORE USING.

PRODUCT INFORMATION

Esplanade® 200 SC is a selective, preemergent, alkylazine herbicide for control of many annual grasses and broadleaf weeds in railroad, roadside, hardscapes, industrial areas, utilities, airports, government and military installations, managed areas (petroleum tank farms, pumping stations, storage areas, rail and utility rights-of-way, utility substations, lumberyards, around farm buildings, non-irrigation ditch banks, fence rows, manufacturing sites, office buildings, educational facilities, parking lots, and under asphalt or concrete as part of site preparation).

Esplanade 200 SC may be used to release or re-establish desirable perennial grasses, forbs, shrubs and trees in non-crop areas such as parks and open space, wildlife management areas, recreational areas, fire rehabilitation areas, prairies and fire breaks.

Esplanade 200 SC controls weeds by reducing the emergence of seedlings through inhibition of cellulose biosynthesis (CB Inhibitor). Necrosis or yellowing may also be observed if the herbicide is applied to herbaceous tissue such as leaves and green stems of susceptible plants. The herbicide needs to be activated prior to weed germination for most effective control. For maximum activity against germinating weeds, Esplanade 200 SC requires rainfall (minimum 0.25 inches) within several weeks after application to activate the herbicide.

Esplanade 200 SC has minimal post emergent activity and generally does not control weeds that have emerged. A post emergent herbicide such as Finale® Herbicide may be mixed with Esplanade 200 SC to control existing weeds. Esplanade 200 SC does not control tubers, rhizomes, and woody vegetation.

Esplanade 200 SC can be applied to terrestrial non-crop sites that contain areas of casual water of a temporary nature as a result of surface water collecting in equipment wheel ruts or in other depressions created by management activities.

Aerial applications of Esplanade 200 SC are allowed to release or re-establish desirable vegetation in non-crop areas such as parks and open space, wildlife management areas, recreational areas, fire rehabilitation areas, prairies, and fire breaks. For all other uses, only ground application is permitted.

USE RESTRICTIONS

- Do not apply directly to water or to soil where standing water is present except as specified on this label.
- Do not apply in or on irrigation ditches/canals including the outer banks.
- Do not contaminate water intended for irrigation and domestic use.
- Do not treat or allow spray drift or runoff to fall into irrigation ditches/canals or other channels that carry water that may be used for irrigation purposes.
- Do not exceed 7 fl oz per acre of Esplanade 200 SC in a single application for all Industrial Vegetation Management applications.
- Do not exceed 10 fl oz per acre of Esplanade 200 SC for all Industrial Vegetation Management applications within a calendar year or in a 12-month period from the previous application.
- Do not apply Esplanade 200 SC to newly seeded turf.
- Do not apply Esplanade 200 SC through an irrigation or chemigation system.
- Aerial applications are only allowed to release or re-establish desirable vegetation in non-crop areas such as parks and open space, wildlife management areas, recreational areas, fire rehabilitation areas, prairies, and fire breaks.
- Do not apply or otherwise permit this product or sprays containing this product to come into contact with any non-target crop or desirable plants.
- Do not make applications when circumstances favor movement from treatment sites.
- Do not apply to frozen or snow covered ground.
- Do not graze or feed forage, hay, or straw from treated areas to livestock.
- Do not use on residential lawns or commercial lawns, golf courses, sod farms, or production and landscape ornamentals.
- Esplanade 200 SC is not for sale, distribution, or use in Nassau County or Suffolk County in New York State.

USE PRECAUTIONS

- Applications made to areas where runoff water flows onto agricultural land may injure crops.
- Applications made during periods of intense rainfall, to soils saturated with water, or soils through which rainfall will not readily penetrate may result in runoff and movement of Esplanade 200 SC.
- Treated soil should be left undisturbed to reduce the potential for Esplanade 200 SC movement by soil erosion, by wind, or water.
- Applications should be made only when there is little or no risk of spray drift or movement of applied product into sensitive areas. Sensitive areas are defined as bodies of water (ponds, lakes, rivers, and streams), habitats of endangered species and non-labeled agricultural crop areas. Refer to the Spray Drift Management section of this label for more details.
- Avoid application to powdery, dry, light or sandy soil when there is little likelihood of rainfall soon after application. Injury to crops or desirable vegetation may result if treated soil is washed, blown, or moved into these areas.

APPLICATION INFORMATION

Apply Esplanade 200 SC with a properly calibrated sprayer according to the manufacturer's directions and check periodically to be certain that the equipment is working properly prior to each use. Uniform application is essential for satisfactory weed control. Avoid overlap. Shut off spray booms while starting, turning, slowing, or stopping to avoid off-target application.

When spraying close or next to ponds, lakes, rivers, and streams be cognizant of keeping the spray solution from reaching the water.

For all applications, follow these guidelines: use spray volumes of 10-100 gallons per acre, spray boom height and spray pressures as low as practical, use coarse droplet producing nozzle tips, use drift control additives and shielded sprayers where practical, and spray when wind speed is low. See the Spray Drift Management section for more details. The use of a hand-held or backpack sprayer is allowed, especially when treating smaller areas. The water volume and use rates are the same on a given area as if treating with a much larger boom sprayer. When using a hand-held or backpack sprayer, do not exceed the use rate restrictions stated on this label.

MIXING INSTRUCTIONS

Ensure that the application equipment has been thoroughly cleaned from previous use before using to apply Esplanade 200 SC. Fill the spray tank with 1/2 of the required volume of water prior to the addition of Esplanade 200 SC. Add the proper amount of Esplanade 200 SC, and then add the rest of the water. Maintain sufficient agitation to ensure an adequate spray mixture during application. If Esplanade 200 SC is to be applied in a tank mixture with other pesticides, add the appropriate amounts of the tank mix partners in the following order: (a) products in water-soluble packaging (WSP), (b) WP, (c) WG or other dry flowables, (d) fertilizers, (e) Esplanade 200 SC, (f) other aqueous suspension products (SC), (g) soluble liquids, (h) emulsifiable concentrates and other organic-solvent based formulations. Continue to fill the tank with water to the desired volume while agitating. **Maintain sufficient agitation during application to ensure a uniform spray mixture.**

Resuspending Esplanade 200 SC in Spray Solution: Like other suspension concentrates (SC), Esplanade 200 SC will settle if left standing without agitation. Re-agitate the spray solution before application.

COMPATIBILITY TESTING WITH OTHER PESTICIDES

A compatibility test must be conducted with any potential tank mix partner with Esplanade 200 SC. Using a clear container, conduct the test as described below:

Fill the container three-quarters full with water.

1. Add the appropriate amount of tank mix partner in the following order: (a) WP (b) dry flowable (c) Esplanade 200 SC (d) aqueous suspensions, (e) soluble liquids, (f) emulsifiable concentrates. Shake or gently stir after each addition to mix thoroughly.
2. After adding all ingredients, let the mixture stand for 15 minutes and look for separation, large flakes, precipitates, gels, and heavy oily film or other signs of incompatibility.
3. If the compatibility test shows signs of incompatibility, do not tank mix the product tested with Esplanade 200 SC.

Vegetation Management Information

Timings, Use Rates, and Maximum Seasonal Rate for Esplanade 200 SC

Apply Esplanade 200 SC prior to weed seed germination. Esplanade 200 SC does not generally control weeds that have emerged. For maximum weed control, the herbicide needs to reach the soil surface and be activated by rainfall or adequate soil moisture. Apply Esplanade 200 SC in the spring for control of spring and summer germinating weeds and apply in the fall for control of winter weeds. The desired rate of Esplanade 200 SC depends on the residual weed activity required and restrictions on the maximum amount of Esplanade 200 SC per season. Esplanade 200 SC may be applied at 3.5-7 fl oz per acre. Do not exceed 7 fl oz of Esplanade 200 SC for a single application. Applications of Esplanade 200 SC must not exceed the maximum label rate (10 fl oz per acre) in a 12-month period after the previous application.

Factors including soil type, rainfall, and the amount of vegetation at the time of treatment may affect weed control. Lower rates of Esplanade 200 SC may be effective for sandy soils, whereas organic soils may require higher rates. If the herbicide is not activated by rainfall prior to weed germination, control may be reduced.

For late fall applications, apply Esplanade 200 SC prior to when the ground freezes.

Tank Mix Combinations

Tank-mix combinations of Esplanade 200 SC plus a non-selective herbicide such as Finale® Herbicide or glyphosate will control existing undesirable vegetation in dormant warm season grasses. Applied as a broadcast spray, Esplanade 200 SC plus a non-selective herbicide such as Finale® Herbicide or glyphosate will provide pre and postemergent control of susceptible species listed on the respective labels of the herbicides in the tank mixture.

Esplanade 200 SC may be tank mixed with the following herbicide active ingredients but not limited to: 2,4-D, aminopyralid, bromacil, dicamba, flumioxazin, fosamine, glufosinate ammonium (Finale® Herbicide), glyphosate, hexazinone, metsulfuron, picloram, simazine, sulfometuron, and triclopyr.

Follow all use restrictions on this label and for all tank mix partners. It is the pesticide user's responsibility to ensure that all products in the listed mixtures are registered for the intended use. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. Note the most restrictive language may come from different labels.

Apply mixtures so that the spray solution covers the soil surface in a uniform manner. If uniform coverage is not achieved, preemergent activity will be inconsistent.

Weeds Controlled or Suppressed by Esplanade 200SC

Broadleaf Weeds Controlled

American black nightshade	<i>Solanum americanum</i>	Lambsquarters, common	<i>Chenopodium album</i>
Bittercress	<i>Cardamine sp.</i>	Lawn burweed	<i>Soliva pterosperma</i>
California burclover	<i>Medicago polymorpha</i>	Little mallow	<i>Malva parviflora</i>
Canada thistle, common (seedlings)	<i>Cirsium arvense</i>	Long-stalk phyllanthus	<i>Phyllanthus tenellus</i>
Carpetweed	<i>Mollugo verticillata</i>	Panicle willowweed	<i>Epilobium paniculatum</i>
Chickweed, common	<i>Stellaria media</i>	Plantain, Buckhorn	<i>Plantago lanceolata</i>
Chickweed, Mouse-ear	<i>Cerastium vulgatum</i>	Plantain, Paleseed	<i>Plantago virginica</i>
Clover, White	<i>Trifolium repens</i>	Prostrate knotweed	<i>Polygonum aviculare</i>
Corn speedwell	<i>Veronica arvensis</i>	Prostrate pigweed	<i>Amaranthus blitoides</i>
Cudweed, Linear-leaf/purple	<i>Gnaphalium purpureum</i>	Prostrate spurge	<i>Euphorbia humifusa</i>
Curly dock (seedlings)	<i>Rumex crispus</i>	Puncturevine	<i>Tribulus terrestris</i>
Cutleaf evening primrose	<i>Oenothera laciniata</i>	Purslane, common	<i>Portulaca oleracea</i>
Dandelion, cat's ear	<i>Hypochoeris radicata</i>	Ragweed, common	<i>Ambrosia artemisiifolia</i>
Dandelion, common (seedlings)	<i>Taraxacum officinale</i>	Red tasselflower	<i>Emilia sonchifolia</i>
Doveweed	<i>Murdannia nudiflora</i>	Redmaids	<i>Calandrinia caulescens</i>
Eclipta	<i>Eclipta alba</i>	Redroot pigweed	<i>Amaranthus retroflexus</i>
Evening primrose, common	<i>Oenothera biennis</i>	Redstem fleabane/Storksbill	<i>Erodium cicutarium</i>
Evening primrose, cutleaf	<i>Oenothera laciniata</i>	Russian Thistle	<i>Salsola tragus</i>
Filaree, redstem	<i>Erodium cicutarium</i>	Shepherd's-purse	<i>Capsella bursa-pastoris</i>
Fleabane, blackleaved	<i>Conza bonariensis</i>	Sowthistle, annual	<i>Sonchus oleraceus</i>
Florida pusley	<i>Richardia scabra</i>	Spotted catsear	<i>Hypochoeris radica</i>
Gromwell, Yellow	<i>Amsinckia calycina</i>	Swinecress	<i>Coronopus didymus</i>
Groundsel, common	<i>Senecio vulgaris</i>	Tropic ageratum	<i>Ageratum conyoides</i>
Hairy fleabane	<i>Erigeron bonariensis</i>	Velvetleaf	<i>Abutilon theophrasti</i>
Hairy nightshade	<i>Solanum sarachoides</i>	Wild buckwheat (seedlings)	<i>Polygonum convolvulus</i>
Henbit	<i>Lamium amplexicaule</i>	Wild mustard	<i>Sinapis arvensis</i>
Horseweed/Marestail	<i>Erigeron canadensis</i>	Yellow starthistle	<i>Centaurea solstitialis</i>
Kochia	<i>Kochia scoparia</i>		

(continued)

Weeds Controlled or Suppressed by Esplanade 200SC (continued)

Grasses and Sedges Controlled

Annual bluegrass	<i>Poa annua</i>	Goosegrass	<i>Eleusine indica</i>
Annual bromegrass	<i>Bromus spp.</i>	Guineagrass	<i>Panicum maximum</i>
Barnyardgrass, common	<i>Echinochloa crus-galli</i>	Medusahead	<i>Taenialatherum caput-medusae</i>
Cheatgrass	<i>Bromus secalinus</i>	Mouse barley	<i>Hordeum murinum</i>
Crabgrass	<i>Digitaria species</i>	Rice flatsedge	<i>Cyperus iria</i>
Crabgrass, Henry	<i>Digitaria adscendens</i>	Rye, Feral	<i>Secale cereale</i>
Crabgrass, Large/Hairy	<i>Digitaria sanguinalis</i>	Ryegrass, Italian	<i>Lolium multiflorum</i>
Crabgrass, Smooth	<i>Digitaria ischaemum</i>	Ryegrass, Perennial	<i>Lolium perenne</i>
Downy brome	<i>Bromus tectorum</i>	Sandbur	<i>Cenchrus longispinus</i>
Foxtail brome	<i>Bromus rubens</i>	Sedge, annual	<i>Cyperus spp.</i>
Foxtail, Giant	<i>Setaria faberi</i>	Sprangletop	<i>Leptochloa spp.</i>
Foxtail, Green	<i>Setaria viridis</i>	Tufted lovegrass	<i>Eragrostis pectinacea</i>
Foxtail, Yellow	<i>Pennisetum glaucum</i>		

Weeds Suppressed

Black medic	<i>Medicago lupulina</i>	Southern brassbuttons	<i>Cotula australis</i>
Black mustard	<i>Brassica nigra</i>	Sunflower, common	<i>Helianthus spp.</i>
False chamomile	<i>Matricaria maritime</i>	Vetch, purple	<i>Vicia benghalensis</i>
London rocket	<i>Sisymbrium irio</i>	Wild carrot	<i>Daucus carota</i>
Prickly lettuce	<i>Lactuca serriola</i>	Woodsorrell, yellow	<i>Oxalis stricta</i>
Sesbania, hemp	<i>Sesbania exaltata</i>	Woodsorrel/Oxalis	<i>Oxalis species</i>
Sida, prickly/teaweed	<i>Sida spinosa</i>		

Use Sites for Esplanade 200 SC	Rate Range (fl oz/A)	Maximum Single Use Rate (fl oz/A)	Maximum Total Yearly Rate (fl oz/A)
Rail and Rail Yards	3.5*-7	7	10
Managed Roadsides	3.5-7	7	10
Warm Season Turf Release	3.5-5	5	10
Restoration or release of desirable vegetation	3.5**-7	7	10
All other use sites listed	3.5-7	7	10

*In Rail and Rail yard use sites, the 3.5 oz rate of Esplanade 200 SC should only be applied under low weed pressure in combination with another approved herbicide. This rate is not intended for stand-alone treatments.

**The 3.5 fl oz rate of Esplanade 200 SC should only be applied under low weed pressure when less preemergence residual control is desired.

Bareground Applications for Non-Residential Non-Crop Sites

Bareground is desired at many non-crop sites for reducing fire hazards, maintaining appropriate lines-of-site, and aesthetic considerations. Examples of sites include but are not limited to guardrails and some median strips near highways, hardscapes, parks, airports, utilities, government and military installations, around farm buildings, manufacturing sites, office buildings, educational facilities, parking lots, and managed areas. Esplanade 200 SC may be used alone for residual weed control or in tank mixture. Tank mixtures with post emergent herbicides help to control existing weeds. Observe use restrictions for all herbicides if a tank mixture is applied. Use-rates for bareground applications depend on the duration of weed control desired and the weed species listed on this label. Apply Esplanade 200 SC at 5-7 fl oz per acre. A repeat application can be made but not to exceed a total amount of 10 fl oz per acre per year.

Restriction: Applications to hardscapes (e.g. patios, paved parking lots, and walkways) may be made by spot application only.

Railroads and Rail Yards

Esplanade 200 SC may be used for preemergent residual control of certain weeds near railroad tracks, ballasts, and rail yards. Follow application instructions under **Bareground Applications** where bareground is the desired result. In situations where warm season turfgrass coverage is desired, such as at railroad crossings, follow use directions under the **Warm Season Turf Release** section of this label. Apply Esplanade 200 SC at 5-7 fl oz per acre. A repeat application can be made but not to exceed a total amount of 10 fl oz per acre per year.

Warm Season Turf Release

Esplanade 200 SC may be used to promote the growth of warm season grasses in areas where low maintenance vegetation or erosion control is desired. Established bermudagrass (*Cynodon dactylon*), centipedegrass (*Eremochloa ophiuroidea*), bahiagrass (*Paspalum notatum*), buffalograss (*Buchloe dactyloides*), and Zoysiagrass (*Zoysia spp.*) are tolerant to Esplanade 200 SC at rates up to 5 fl oz per acre. Application of Esplanade 200 SC in the spring or fall to these grasses will control labeled weeds and allow low maintenance turf to develop. A repeat application can be made but not to exceed a total amount of 10 fl oz per acre per year. Cool season grasses such as Kentucky bluegrass (*Poa pratensis*), perennial ryegrass (*Lolium perenne*), and fescues (*Festuca sp*) are not tolerant to Esplanade 200 SC. Use Esplanade 200 SC on these grasses only when removal of these grasses is desired.

Esplanade 200 SC can inhibit the emergence of seed and damage newly emerged seedlings. Seeding into turf treated with Esplanade 200 SC should be delayed until at least **8 months** after application. Applications to newly seeded turf made sooner than **8 months** after emergence may significantly reduce stand establishment and turf vigor.

Release or Restoration of Desirable Vegetation

Esplanade 200 SC may be used to release or re-establish desirable perennial grasses, forbs, shrubs and trees in non-crop areas such as parks and open space, wildlife management areas, recreational areas, fire rehabilitation areas, prairies and fire breaks.

Application Timings and Rates

Apply Esplanade 200 SC at 3.5 to 7 fl oz per acre. The 3.5 fl oz rate of Esplanade 200 SC should only be applied under low weed pressure when less preemergence residual control is desired. For the best residual control, apply Esplanade 200 SC at 5 to 7 fl oz per acre.

Esplanade 200 SC may be applied by ground or aerial equipment (helicopter or fixed wing).

Timing of application is determined by precipitation expectation and weed targets. Apply during periods when sufficient precipitation to activate the herbicide is expected prior to target weed germination, but avoid application if heavy rain is expected which can move treated soil into areas with crops or desirable vegetation.

Esplanade 200 SC has minimal post emergent activity and generally does not control weeds that have emerged. A labeled post emergent herbicide may be mixed with Esplanade 200 SC to control existing weeds. Refer to "Tank Mix Combinations" section for specific tank mix instructions.

Low rainfall areas of the West: Apply in the fall, winter, or spring. Esplanade 200 SC will not control winter annuals that have emerged at the time of application or that emerge prior to activating rainfall. A post emergence tank mix partner is needed to control winter annuals that have emerged at the time of application. Susceptible winter annual weeds that have emerged and escape the post emergence herbicide may be controlled preemergence the following season depending on the rate of Esplanade 200 SC used. Esplanade 200 SC at the highest labeled rate may provide several years of residual preemergence control of winter annual grasses such as downy brome, cheatgrass, feral ryegrass, and medusahead.

High rainfall areas of the East: Apply in the fall to control winter annual weeds or apply in the spring to control spring and summer germinating weeds. A tank mix partner is needed to control weeds that have emerged at the time of application.

Established perennial grasses that are tolerant to Esplanade 200 SC:

The following tables list species that have demonstrated tolerance to Esplanade 200 SC. When treating areas with desirable species not listed in the tables, treat a small area to confirm tolerance prior to large scale use.

Cool Season Grasses	Warm Season Grasses
Crested Wheatgrass (<i>Agropyron cristatum</i>) Green Needlegrass (<i>Nassella viridula</i>) Intermediate Wheatgrass (<i>Thinopyrum intermedium</i>) Needle-and-thread (<i>Hesperostipa comata</i>) Prairie Junegrass (<i>Koeleria macrantha</i>) Streambank Wheatgrass (<i>Elymus lanceolatus</i>) Western Wheatgrass (<i>Pascopyrum smithii</i>)	Blue Grama (<i>Bouteloua gracilis</i>) Sand Dropseed (<i>Sporobolus cryptandrus</i>)

Established forbs and shrubs that are tolerant to Esplanade 200 SC:

Forbs and Shrubs	
Broom groundsel (<i>Senecio spartioides</i>) Fringed Sage (<i>Artemisia frigida</i>) Lemon Scurfpea (<i>Psoralidium lanceolatum</i>) Louisiana Sage (<i>Artemisia ludoviciana</i>) Prickly Pear (<i>Opuntia</i>) Porter's aster (<i>Symphyotrichum porter</i>)	Scarlet globemallow (<i>Sphaeralcea coccinea</i>) Short's milkvetch (<i>Astragalus shortianus</i>) Sulphur Flower (<i>Eriogonum umbellatum</i>) Western Ragweed (<i>Ambrosia psilostachya</i>) Wild Tarragon (<i>Artemisia dracunculus</i>)

Use Restrictions:

Do not apply to frozen or snow covered ground.

Do not graze or feed forage, hay, or straw from treated areas to livestock.

Precautions:

Avoid application to powdery, dry, light or sandy soil when there is little likelihood of rainfall soon after application. Injury to crops or desirable vegetation may result if treated soil is washed, blown, or moved into these areas.

If planning to plant desirable species in the treated area, avoid planting for at least eight months after application. A field bioassay must then be completed before planting. To conduct a field bioassay, grow to maturity test strips of the species you plan to plant. The test strips should cross the entire area including knolls and low areas. Response to the field bioassay will indicate whether or not to plant the species grown in the test strips. If no injury (such as poor germination, stunting, chlorosis, malformation, or necrosis) the species grown in the test strips may be planted.

Aerial Use Directions (Release or Restoration of Desirable Vegetation)

For aerial application (helicopter and fixed wing aircraft), use 5-30 gallons of spray volume per acre.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward, parallel with the air stream and never be pointed downwards more than 45 degrees.
3. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

Where states have more stringent regulations, they must be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

For helicopters, use a boom length and position that prevents the spray from entering the rotor vortices, normally accomplished by a spray boom length that does not exceed the rotor diameter.

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. Avoid application if wind conditions are gusty. Local terrain may influence wind patterns; the applicator should be familiar with local conditions and understand how they may impact spray drift. Boom or nozzle shielding can reduce the effects of wind or air currents on drift. Verify that the shields do not interfere with uniform deposition of product prior to application.

Resistance Management Guidelines

Continual use of herbicides with a single mode of action encourages the development of resistant weeds. Esplanade 200 SC is a Group 29 Herbicide that contains the active ingredient indaziflam. Esplanade 200 SC may be used in programs with other preemergence herbicides with different modes of action. No known resistance to Esplanade 200 SC exists, and there are no known instances of cross-resistance between this product and other classes of herbicides, or modes of action. Performance of this product is not affected by the presence of biotypes resistant to glyphosate, triazines, ALS-inhibiting, growth regulator, or other herbicide modes of action. When resistance of a specific weed is confirmed, rotation of Esplanade 200 SC in one season followed by a preemergent herbicide with another mode of action in the subsequent season, for example, will reduce existing populations and minimize further development of resistant weeds. Contact a Bayer Environmental Sciences representative for the latest information on resistance management guidelines for this product.

Spray Drift Management

Spray equipment and weather affect spray drift. Consider all factors when making application decisions. Where states have more stringent regulations, they must be observed. Avoiding spray drift is the responsibility of the applicator. To reduce the potential for drift, the ground application equipment must be set to apply coarse or greater droplets (i.e., ASABE Standard 572.1) with corresponding spray pressure. Use high flow rate nozzles to apply the highest practical spray volume. With most nozzle types, narrower spray angles produce larger droplets. Follow the nozzle manufacturer's directions on pressure, orientation, spray volume, etc., in order to minimize drift and optimize coverage and control.

Sensitive Areas

Sensitive areas are defined as bodies of water (ponds, lakes, rivers, and streams), wetlands, habitats of endangered species and non-labeled agricultural crop areas. Applicators must take all precautions necessary to keep spray drift from reaching sensitive areas. Only apply this product when the potential for drift to adjacent sensitive areas is minimal (e.g. when wind is blowing away from the sensitive areas). The applicator is responsible for considering all these factors when making decisions. Do not apply under circumstances where possible drift to unprotected persons, food, forage, or other plantings that might be damaged, as crops thereof may be rendered unfit for sale, use, or consumption.

Wind

Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing. Many factors influence spray drift potential including droplet size, equipment type, and local terrain. Drift potential increases if wind is in excess of 10 mph, gusty, or below 2 mph (due to inversion potential). Always make applications when there is some air movement to determine the direction and distance of possible spray drift. The applicator should be familiar with local conditions and how it may influence spray drift.

Temperature Inversion

A surface temperature inversion (i.e., increasing temperature with increasing altitude) greatly increases the potential for drift. Avoid application when conditions are favorable to inversion. Presence of ground fog is a good indicator of a surface temperature inversion.

Controlling Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that still provide sufficient coverage and control. Uniform spray coverage is important to maximize weed control. Applying larger droplets will reduce drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions such as wind speed, temperature and humidity, and temperature inversion situations.

Spray volume, pressure, and nozzle selection are all important for reducing drift. Select a high flow rate nozzle to apply the highest practical spray volume. High flow rate nozzles produce larger droplets. Use lower spray pressures within the recommended range for the nozzle. If a higher flow rate is needed, increase the nozzle size instead of increasing pressure. Lower spray pressures produce larger droplets. Also, consider using low-drift nozzles.

Set the boom and make applications at the lowest height that safely permits uniform coverage of the soil and minimizes droplet evaporation. Avoid application if wind conditions are gusty. Local terrain may influence wind patterns. The applicator should be familiar with local conditions and understand how they may impact spray drift.

Drift Control Additive

Drift control additive may also be used with most spray equipment to reduce the potential for drift. When using a drift control additive, read and follow all directions on the additive label.

Shielded Sprayers

Shielding the boom or individual nozzles may also reduce the potential for drift. However, it is the responsibility of the applicator to verify that the shield does not interfere with uniform spray coverage.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store product in original container only. Store in cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" designation.

Rigid, Non-refillable containers small enough to shake (i.e., with capacities equal to or less than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

Rigid Non-refillable containers that are too large to shake (i.e., with capacities greater than 5 gallons or 50 pounds)

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

Do not transport if container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire, or other emergency, contact BAYER CROPSOURCE LP at 1-800-334-7577, day or night.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Bayer CropScience LP. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSOURCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSOURCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSOURCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Bayer (reg'd), the Bayer Cross (reg'd), Finale® and Esplande® are registered trademarks of Bayer.

Produced for:

Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Bayer



EsplAnade® 200 SC

Preemergent Herbicide for the Control of Annual Grasses and Broadleaf Weeds in Non-Residential Non-Crop Areas, Railroad and Rail Yards, Managed Roadsides, Fence Rows, Utilities, Hardscapes, Industrial, Municipal, and Government Sites, and for the Release or Restoration of Desirable Vegetation in Parks and Open Space, Wildlife Management Areas, Recreational Areas, Fire Rehabilitation Areas, Prairies and Fire breaks.

ACTIVE INGREDIENT:

Indaziflam (CAS No: 730979-19-8) 19.05%

OTHER INGREDIENTS: 80.95%

TOTAL: 100.00%

EPA Reg. No. 432-1516

Contains 1.67 pounds of indaziflam per gallon

KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL and TRANSPORTATION Emergencies
ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-800-331-2867

See Booklet for Complete Precautionary Statements and
Directions for Use.

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything to an unconscious person.
If on skin:	<ul style="list-style-type: none"> Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
For MEDICAL Emergencies Call 24 Hours A Day 1-800-334-7577	
Have the product container or label with you when calling a poison control center or doctor or going for treatment.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND

DOMESTIC ANIMALS

CAUTION

Harmful if swallowed, absorbed through the skin or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. All mixers, loaders, applicators and other handlers must wear long-sleeved shirt, long pants, shoes plus socks, and waterproof gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using toilet. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, aquatic invertebrates, and plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean watermark. Do not contaminate water when disposing of rinsate or washwater. This product may impact water through spray drift or runoff. Follow directions for use to avoid spray drift and runoff. A level well maintained vegetative buffer strip between areas to which this product is applied and surface water features including ponds, streams, and springs will reduce the potential of this product entering water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory: This pesticide has properties and characteristics associated with chemicals detected in groundwater. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory: This pesticide may impact water quality due to runoff of rainwater. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having a high potential for reaching surface water via runoff for several months or more after application.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store product in original container only. Store in cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

Container Handling: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" designation.

Non-refillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinse into application equipment or a mix tank or store rinse for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or by incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.

(01)00785740197820

Nonrefillable Container
Net Contents

2.5 Gallons

80878486

61380637B 160503AV1

Bayer

Produced for:
Bayer Environmental Science
A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Product of Germany

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

1/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name ESPLANADE® 200 SC

Product code (UVP) 79930208

SDS Number 102000023686

EPA Registration No. 432-1516

Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Specific target organ toxicity - repeated exposure: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

May cause damage to organs (Nervous system) through prolonged or repeated exposure.

Precautionary statements

Do not breathe spray.

Get medical advice/ attention if you feel unwell.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

2/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Indaziflam	950782-86-2	19.05

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	No symptoms known or expected.
-----------------	--------------------------------

Indication of any immediate medical attention and special treatment needed

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.
------------------	---

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

3/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

Special hazards arising from the substance or mixture In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Nitrogen oxides (NOx)

Advice for firefighters

Special protective equipment for firefighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point > 100 °C
Not relevant; aqueous solution

Auto-ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

Explosivity Not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

4/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Advice on protection against fire and explosion No special precautions required.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Indaziflam	950782-86-2	0.14 mg/m ³ (TWA)		OES BCS*
1,2-Propanediol	57-55-6	500ppb (ST ESL)	03 2014	TX ESL
1,2-Propanediol	57-55-6	100ug/m ³ (AN ESL)	03 2014	TX ESL
1,2-Propanediol	57-55-6	1000ug/m ³ (ST ESL)	03 2014	TX ESL
1,2-Propanediol	57-55-6	50ppb (AN ESL)	03 2014	TX ESL
1,2-Propanediol (Aerosol.)	57-55-6	10 mg/m ³ (TWA)	2010	WEEL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

5/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

Respiratory protection	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.
Hand protection	Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
Eye protection	Safety glasses with side-shields
Skin and body protection	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white
Physical State	suspension
Odor	characteristic
Odour Threshold	No data available
pH	7.0 - 8.5 at 1 % (23 °C) (deionized water)
Vapor Pressure	No data available
Vapor Density (Air = 1)	No data available
Density	ca. 1.05 g/cm³ at 20 °C
Evaporation rate	No data available
Boiling Point	No data available
Melting / Freezing Point	No data available
Water solubility	dispersible
Minimum Ignition Energy	Not applicable
Decomposition temperature	Stable under normal conditions.
Partition coefficient: n-octanol/water	No data available
Flash point	> 100 °C Not relevant; aqueous solution
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not applicable

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

6/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Store only in the original container.
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Eye contact, Inhalation, Skin Absorption, Ingestion

Immediate Effects

Skin	Harmful if absorbed through skin.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity	LD50 (Rat) >= 5,000 mg/kg
Acute inhalation toxicity	LC50 (Rabbit) > 3,624 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. Highest attainable concentration.
Acute dermal toxicity	LD50 (Rat) > 2,000 mg/kg
Skin irritation	No skin irritation (Rabbit)
Eye irritation	No eye irritation (Rabbit)
Sensitisation	Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test

Assessment repeated dose toxicity

Indaziflam caused neurobehavioral effects and/or neuropathological changes in subchronic studies in rats and dogs.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

7/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

Assessment mutagenicity

Indaziflam was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Indaziflam was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Indaziflam was not a primary reproductive toxicant in a two-generation study in rats.

Assessment developmental toxicity

Indaziflam did not cause developmental toxicity in rats and rabbits.

Further information

Acute toxicity studies have not been performed on this product as formulated.

Acute toxicity studies have been bridged from a similar formulation(s).

The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 149 mg/l
Exposure time: 48 h

Toxicity to aquatic plants EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.75 mg/l
Exposure time: 72 h

Biodegradability Indaziflam:
Not rapidly biodegradable

Koc Indaziflam: Koc: 496

Bioaccumulation Indaziflam: Bioconcentration factor (BCF) 66
Does not bioaccumulate.

Mobility in soil Indaziflam: Moderately mobile in soils

Additional ecological information No other effects to be mentioned.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

8/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

Environmental precautions

- Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
- Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
- Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.
- Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Do not contaminate water, food, or feed by disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
Contaminated packaging	Do not re-use empty containers. Triple rinse containers. Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke. Follow advice on product label and/or leaflet.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number	3082
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION)

IATA

UN number	3082
Class	9
Packaging group	III

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

9/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1516

US Federal Regulations

TSCA list

None.

US Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None.

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

10/10

Revision Date: 06/14/2016
Print Date: 06/15/2016

Signal word: Caution!

Hazard statements: Harmful if swallowed, inhaled or absorbed through the skin.
Avoid contact with skin, eyes and clothing.
Avoid breathing spray mist.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	US. IARC Monographs on Occupational Exposures to Chemical Agents
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: The following sections have been revised: Section 11: Toxicological Information.

Revision Date: 06/14/2016

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.

DO NOT USE PLANT MATERIAL TREATED WITH
METHOD® 240SL HERBICIDE FOR MULCH OR COMPOST



Method® 240SL

HERBICIDE

Soluble Liquid For Non-Crop Use

ACTIVE INGREDIENT:

Potassium salt of aminocyclopyrachlor
Potassium salt of 6-amino-5-chloro-2-

-cyclopropyl-4-pyrimidinecarboxylic acid* 25%

OTHER INGREDIENTS: 75%

By Weight

TOTAL: 100%

*Acid Equivalent: 6-Amino-5-chloro-2-
cyclopropyl-4-pyrimidinecarboxylic acid
- 2 pounds acid per gallon or 21.2%

EPA Reg. No. 432-1565

KEEP OUT OF REACH OF CHILDREN CAUTION

Not for sale, sale into, distribution, and/or use in
Nassau and Suffolk counties of New York State.
Si usted no entiende la etiqueta, busque a alguien
para que se la explique a usted en detalle. (If you
do not understand this label, find someone to
explain it to you in detail.)

See Back Panel for First Aid Instructions and
Booklet for Complete Precautionary Statements
and Directions for Use.

Nonrefillable Container

Net Contents

2.5 Gallons

84099295

84942561D 200928AV1

FIRST AID

If in eyes:	<ul style="list-style-type: none">Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.Call a poison control center or doctor for treatment advice.
-------------	---

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Mixers, loaders, and applicators must wear long-sleeved shirt and long pants, shoes plus socks. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of aminocyclopyrachlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory

Aminocyclopyrachlor has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

METHOD® 240SL HERBICIDE must be used only in accordance with directions on this label or in separately published BAYER CROPSCIENCE LP directions.

BAYER CROPSCIENCE LP will not be responsible for losses or damages resulting from the use of this product in any manner not specifically directed by BAYER CROPSCIENCE LP. User assumes all risks associated with such non-directed use.

METHOD 240SL HERBICIDE contains aminocyclopyrachlor. When applied alone or in combination with other products containing aminocyclopyrachlor, do not apply more than a total of 0.28 lb ae of active ingredient per acre per year.

PRODUCT INFORMATION

METHOD 240SL HERBICIDE is a soluble liquid that is mixed in water and applied as a spray. METHOD 240SL HERBICIDE may be applied by aerial or ground equipment for control of broadleaf weeds and woody species, including many terrestrial and riparian invasive and noxious weeds. METHOD 240SL HERBICIDE is registered for weed and brush control on private, public, and military lands as follows: non-crop areas such as airports, highways/roadsides, railroad, pipeline and utility rights-of-way, sewage disposal areas, industrial areas, such as electrical substations, rail yards or other industrial rock areas, farmyards, fuel storage areas, fence rows, non-irrigation ditch banks, barrier strips, lumberyards, pumping stations and tank farms, restoration areas, natural areas, wildlife management areas, wildlife openings, and wildlife habitats. METHOD 240SL HERBICIDE may be used for the release or restoration of native perennial grasses and in established industrial turf grasses.

This product may be applied to terrestrial non-crop sites and unimproved turf sites that contain areas of temporary surface water, caused by collection of water in equipment ruts or in other depressions created by management activities. It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps, and bogs after water has receded, as well as seasonally dry flood deltas. METHOD 240SL HERBICIDE may be applied up to the water's edge. Do not apply directly to water and take precautions to minimize overspray to open water when treating vegetation near the water's edge.

METHOD 240SL HERBICIDE provides preemergence and/or postemergence control of the broadleaf weeds, vines, and brush species listed in the WEEDS CONTROLLED section of the label. For perennial species on the label, a postemergence application should be used. For best postemergence performance, a methylated seed oil (MSO) adjuvant should be included to the spray solution. Excessive wetting of the target plant is not necessary but good spray coverage of the target plant is needed for best results. Weeds hardened off by cold weather or drought stress may not be controlled.

METHOD 240SL HERBICIDE is non-corrosive to spray equipment.

BIOLOGICAL ACTIVITY

METHOD 240SL HERBICIDE is quickly taken up by the leaves, stems, and roots of plants. The effects of METHOD 240SL HERBICIDE may be seen on plants from within a few hours to a few days. The most noticeable symptom is a bending and twisting of stems and leaves. Other advanced symptoms include severe necrosis, stem thickening, growth stunting, leaf crinkling, calloused stems and leaf veins, leaf-cupping, and enlarged roots. Death of treated broadleaf plants may require several more weeks and up to several months for some woody plant species. METHOD 240SL HERBICIDE is rain-fast at 1 hour after application.

IMPORTANT RESTRICTIONS

- Do not apply METHOD 240SL HERBICIDE within the root zone of desirable trees and/or shrubs unless injury or loss can be tolerated. Root zones of desirable trees/shrubs may extend beyond the tree canopy.
- Do not apply this product if site-specific characteristics and conditions exist that could contribute to movement and unintended root zone exposure to desirable trees or vegetation, unless injury or loss can be tolerated.
- Do not make applications when circumstances favor movement from treatment site.
- Do not apply METHOD 240SL HERBICIDE to highways/roadsides or other non-crop areas during periods of intense rainfall or where prevailing soils are either saturated with water or of a type through which rainfall will not readily penetrate, as this may result in off-site movement.
- Do not apply or otherwise permit this product or sprays containing this product to come into contact with any non-target crop or desirable vegetation.
- Do not apply in or on dry or water containing irrigation ditches or canals including their outer banks.
- Do not apply through any type of irrigation system.
- Do not contaminate water intended for irrigation. To avoid injury to crops or other desirable vegetation, do not treat or allow spray drift or run-off to fall onto banks or bottoms of irrigation ditches, either dry or containing water, or other channels that carry water

that may be used for irrigation purposes.

- Do not apply METHOD 240SL HERBICIDE when powdery dry soil or light or sandy soils are known to be prevalent in the area to be treated. Treatment of powdery dry soil and light sandy soils, when there is little likelihood of rainfall soon after treatment, may result in off target movement and possible damage to susceptible crops and desirable vegetation when soil particles are moved by wind or water. Injury to crops or desirable vegetation may result if treated soil is washed, blown, or moved onto land used to produce crops or land containing desirable vegetation.
- Do not apply when the soil is frozen or covered with snow.
- Do not use on lawns, walks, paved driveways, tennis courts, or similar areas.
- Do not apply more than 18 fluid ounces (0.28 pound ae) per acre per year.
- Do not graze or feed forage, hay, or straw from treated areas to livestock.
- Do not use plant material treated with this product for mulch or compost.
- Do not plant the treated sites for at least one year after the METHOD 240SL HERBICIDE application if non-crop sites treated with METHOD 240SL HERBICIDE are to be converted to a food, feed, or fiber agricultural crop, or to a horticultural crop. A field bioassay must then be completed before planting the desired crop.

IMPORTANT PRECAUTIONS

- Certain species, in particular, may be sensitive to low levels of METHOD 240SL HERBICIDE including but not limited to conifers (such as Douglas fir, Norway spruce, ponderosa pine and white pine), deciduous trees (such as aspen, Chinese tallow, cottonwood, honey locust, magnolia, poplar species, redbud, silver maple, and willow species), and ornamental shrubs (such as arborvitae, burning bush, crape myrtle, forsythia, hydrangea, ice plant, magnolia, purple plum, and yew).
- Injury or loss of desirable trees or vegetation may result if METHOD 240SL HERBICIDE is applied on or near desirable trees or vegetation, on areas where their roots extend, or in locations where the treated soil may be washed or moved into contact with their roots. Consider site-specific characteristics and conditions that could contribute to unintended root zone exposure to desirable trees or vegetation. Root zone areas of desirable trees or vegetation are affected by local conditions and can extend beyond the tree canopy. If further information is needed regarding root zone area, consult appropriate state extension service, professional consultant, or other qualified authority.
- Injury to or loss of desirable trees or vegetation may result if equipment is drained or flushed on or near these trees or vegetation or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- In non-crop areas adjacent to desirable vegetation, avoid overlapping spray applications and shut off spray to the spray boom while starting, turning, slowing, or stopping to avoid injury to desirable vegetation.
- Applications made where runoff water flows onto agricultural land may injure or kill crops such as, but not limited to, sugar beets, potatoes, tomatoes, tobacco, soybeans, field beans, alfalfa, grapes, peaches, almonds, and vegetables.
- Applications should be made only when there is little or no hazard from spray drift. Very small quantities of spray, which may not be visible, may seriously injure susceptible plants.
- Exposure to METHOD 240SL HERBICIDE may injure or kill most crops and may injure or kill desirable vegetation. Injury may be more severe when the crops or desirable vegetation are irrigated.
- Caution is advised when using this product in areas where loss of desirable conifer or deciduous trees and/or shrubs, as well as other broadleaf plants, including but not limited to legumes and wild flowers, cannot be tolerated. Without prior experience, it is necessary that small areas containing these plants be tested for tolerance to METHOD 240SL HERBICIDE and its soil residues before any large scale spraying occurs.
- Low rates of METHOD 240SL HERBICIDE can kill or severely injure most crops. Following a METHOD 240SL HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which METHOD 240SL HERBICIDE is not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.
- Leave treated soil undisturbed to reduce the potential for METHOD 240SL HERBICIDE movement by soil erosion due to wind or water.
- In the case of suspected off-site movement of METHOD 240SL HERBICIDE to cropland, soil samples should be quantitatively analyzed for METHOD 240SL HERBICIDE, or any other herbicide which could be having an adverse effect on the crop, in addition to conducting the field bioassay.
- METHOD 240SL HERBICIDE may suppress or severely injure certain established grasses, such as some bromegrass and wheatgrass species, especially when the grass plants are stressed by adverse environmental conditions. Areas that contain these grass plants should recover as environmental conditions for good grass growth occur.

FIELD BIOASSAY

To conduct a field bioassay, grow to maturity test strips of the crop you plan to grow the following year. The test strips should cross the entire field including knolls and low areas. Crop response to the field bioassay will indicate whether or not to plant the crops grown in the test strips. If no crop injury (such as, poor germination, stunting, or chlorosis, malformation, or necrosis of leaves) or yield loss is evident from the crops grown in the test strips, the intended rotational crop may be planted. If herbicide symptoms or yield loss is observed, do not plant the crop.

TANK MIXTURES

METHOD 240SL HERBICIDE may be tank mixed with other herbicides which are registered for the same use sites, methods of application, and timings as specified on this product label. Refer to the tank mix product label for any additional instructions or use restrictions. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. In addition, a spray adjuvant may be mixed with METHOD 240SL HERBICIDE when making postemergence applications. Refer to the adjuvant label for additional instructions or use restrictions.

ADJUVANTS

Methylated Seed Oils and Vegetable Oils: A methylated seed oil (MSO) or vegetable oil based adjuvant may provide increased leaf absorption of METHOD 240SL HERBICIDE. Include the MSO or vegetable oil adjuvant at 1% v/v (1 gallon per 100 gallons of spray solution).

Non-Ionic Surfactants: Use a non-ionic surfactant at a minimum rate of 0.25% v/v (1 quart surfactant per 100 gallons of spray solution). Surfactant products must contain at least 70% non-ionic surfactant.

Invert Emulsions: METHOD 240SL HERBICIDE may be applied as an invert emulsion. The spray solution results in an invert (water- in-oil) spray emulsion designed to minimize spray drift and spray run-off, resulting in more herbicide deposited on the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Consult the invert chemical label for proper mixing directions.

INVASIVE SPECIES MANAGEMENT

This product may be used on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants. Effective EDRR systems address invasions by eradicating the invader

where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is recommended, a Rapid Response needs to be taken to quickly contain, deny reproduction, and, if possible, eliminate the invader. Consult your appropriate state extension service, forest service, or regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

HERBICIDE RESISTANCE MANAGEMENT

Method 240SL contains aminocyclopyrachlor, a Group 4 Herbicide. Some naturally occurring weed biotypes that are resistant to aminocyclopyrachlor may exist due to genetic variability in a weed population. When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species, naturally-occurring resistant biotypes may survive, propagate, and become dominant in that area. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action. Weed escapes that are allowed to go to seed will promote the spread of resistant biotypes.

To better manage herbicide resistance through delaying the proliferation and possible dominance of herbicide resistant weed biotypes, it is important to implement a diversified weed control strategy that includes the use of multiple herbicides with different sites of action in either tank-mix or sequential application. Also, incorporate non-chemical weed control practices where practical.

Report any incidence of non-performance of this product against a particular weed species to a Bayer representative or contact 1-800-331-2867. It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Consult your agricultural dealer, consultant, applicator, and/or appropriate state agricultural extension service representative for further guidance on specific alternative cultural practices or herbicide recommendations in your area.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants, or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

APPLICATION INFORMATION

METHOD 240SL HERBICIDE may be applied using low and high volume ground spray equipment, fixed-wing aircraft, or by helicopter. When applying by fixed-wing aircraft or helicopter, follow directions under the AERIAL APPLICATIONS section of this label; otherwise refer to GROUND APPLICATIONS section of this label.

For control of broadleaf weeds, woody plants, and vines, use METHOD 240SL HERBICIDE at rates of 4-18 fluid ounces per acre per year (0.063-0.28 lb ae/A/year). Refer to the WEEDS CONTROLLED table for specific rate information. Spray volumes should be selected in order to provide uniform and complete coverage of the target plants or application sites. Care should be taken to avoid runoff from all applications. For postemergence applications, include either a MSO or vegetable oil or a non-ionic surfactant as described in the ADJUVANTS section of this label.

Invert Emulsions: METHOD 240SL HERBICIDE may be applied as an invert emulsion. The spray solution results in an invert (water-in-oil) spray emulsion designed to minimize spray drift and spray run-off, resulting in more herbicide deposited on the target foliage. The spray emulsion may be formed in a single tank (batch mixing) or injected (in-line mixing). Consult the invert chemical label for proper mixing directions.

SPRAY EQUIPMENT

Be sure the sprayer is calibrated before use. Use a sufficient volume of water that will deliver a uniform spray pattern and coverage of the target brush or weeds.

The selected sprayer should be equipped with an agitation system to help keep METHOD 240SL HERBICIDE suspended in the spray tank.

Note: Low rates of METHOD 240SL HERBICIDE can kill or severely injure most crops. Following an METHOD 240SL HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which METHOD 240SL HERBICIDE is not registered may result in their damage.

MIXING INSTRUCTIONS

1. Fill the tank 1/3 to 1/2 full of water.
2. While agitating, add the required amount of METHOD 240SL HERBICIDE.
3. Continue agitation until the METHOD 240SL HERBICIDE is fully dispersed, at least 5 minutes.
4. Once the METHOD 240SL HERBICIDE is fully dispersed, maintain agitation and continue filling tank with water. METHOD 240SL HERBICIDE should be thoroughly mixed with water before adding any other material.
5. As the tank is filling, add tank mix partners (if desired) and then add the necessary volume of spray adjuvants. Always add spray adjuvants last.
6. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly re-agitate before using.
7. Apply METHOD 240SL HERBICIDE spray mixture within 24 hours of mixing to avoid product degradation.

SPRAYER CLEANUP

The spray equipment must be cleaned before METHOD 240SL HERBICIDE is sprayed. Follow the cleanup procedures specified on the labels of the previously applied products.

AT THE END OF THE DAY

It is recommended that, during periods when multiple loads of METHOD 240SL HERBICIDE are applied, at the end of each day of spraying the interior of the tank should be rinsed with fresh water and then partially filled and the boom and hoses flushed.

This will prevent the buildup of dried pesticide deposits which can accumulate in the application equipment.

1. Empty the tank and drain the sump completely.
2. Spray the tank walls with clean water using a minimum volume of 10% of the tank volume. Circulate the water through the lines, including all by-pass lines, for at least two minutes. Flush the boom well and empty the sprayer. Completely drain the sump.
3. Repeat step 2.
4. Remove the nozzles and screens and clean separately in a bucket containing water. The rinsate solution may be applied to the non-crop sites listed on this label. Do not exceed the maximum labeled use rate. If cleaners are used, consult the cleaner label for rinsate disposal instructions. If no instructions are given, dispose of the rinsate on site or at an approved waste disposal facility.

Notes:

1. Always start with a clean spray tank.
2. Steam-cleaning aerial spray tanks is recommended to facilitate the removal of any caked deposits.
3. When METHOD 240SL HERBICIDE is tank mixed with other pesticides, all cleanout procedures for each product should be examined, and the most rigorous procedure should be followed.
4. In addition to this cleanout procedure, all pre-cleanout guidelines on subsequently applied products should be followed as per the individual labels.
5. Low rates of METHOD 240SL HERBICIDE can kill or severely injure most crops. Following a METHOD 240SL HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which METHOD 240SL HERBICIDE or its active ingredients are not

registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

SPRAY DRIFT MANAGEMENT

The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.

IMPORTANCE OF DROPLET SIZE

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. The presence of sensitive species nearby, the environmental conditions, and pest pressure may affect how an applicator balances drift control and coverage. APPLYING LARGER DROPLETS REDUCES DRIFT POTENTIAL, BUT WILL NOT PREVENT DRIFT IF APPLICATIONS ARE MADE IMPROPERLY OR UNDER UNFAVORABLE ENVIRONMENTAL CONDITIONS! See Wind, Temperature and Humidity, and Temperature Inversions sections of this label.

CONTROLLING DROPLET SIZE - GENERAL TECHNIQUES

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Use the lower spray pressures recommended for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. WHEN HIGHER FLOW RATES ARE NEEDED, USE A HIGHER-CAPACITY NOZZLE INSTEAD OF INCREASING PRESSURE.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles.

CONTROLLING DROPLET SIZE - AIRCRAFT

- Number of Nozzles - Use the minimum number of nozzles with the highest flow rate that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is emitted backwards, parallel to the air stream will produce larger droplets than other orientations.
- Nozzle Type - Solid stream nozzles (such as disc and core with swirl plate removed) oriented straight back produce larger droplets than other nozzle types.
- Boom Length - The boom length should not exceed 3/4 of the wing or rotor length - longer booms increase drift potential.
- Application Height - Application more than 10 ft above the canopy increases the potential for spray drift.

BOOM HEIGHT

Setting the boom at the lowest labeled height (if specified) that provides uniform coverage reduces the exposure of droplets to evaporation and wind. For ground equipment, the boom should remain level with the crop and have minimal bounce.

WIND

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size and equipment type, determine drift potential at any given wind speed. AVOID GUSTY OR WINDLESS CONDITIONS. Note: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, set up equipment to produce larger droplets to reduce effects of evaporation.

SURFACE TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind.

They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SHIELDED SPRayers

Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

SENSITIVE AREAS

The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

DRIFT CONTROL ADDITIVES

Drift control additives may be used with all spray equipment with the exception of controlled droplet applicators. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the label. It is recommended that drift control additives be certified by the Chemical Producers and Distributors Association (CPDA).

AERIAL APPLICATIONS

When applying by air, apply only using nozzles which will deliver coarse or greater (VMD >350 microns) droplets as defined by ASABE S572 standard. Do not release spray at a height greater than 10 feet above the ground or canopy unless a greater height is required for aircraft safety. Do not apply when wind speed is greater than 10 mph. Do not apply during a temperature inversion.

For aerial applications near susceptible crops or other desirable plants, use a drift control additive as recommended by the manufacturer, or apply through a "Microfoil" or "Thru-Valve" boom, or use an equivalent drift control system. Thickened sprays prepared by using high viscosity invert systems, or other drift control systems, may be utilized if drift control is comparable to that obtained with drift control additives or the "Thru-Valve" boom. If a spray thickening agent is used, follow all recommendations and precautions on the product label. Do not use a thickening agent with the "Microfoil" boom or other systems that cannot accommodate thick sprays.

METHOD 240SL HERBICIDE may be applied by either fixed-wing aircraft or helicopter spray equipment. Fixed-wing aircraft and helicopters can be used to apply METHOD 240SL HERBICIDE; however, do not make applications by fixed-wing aircraft unless appropriate buffer zones can be maintained to prevent spray drift out of the target area or, when treating open tracts of land, spray drift as a result of fixed wing aircraft application can be tolerated.

The application volume required will vary with the height and density of the brush and the application equipment used.

Generally, aerial applications will require 15 to 25 gallons of spray solution per acre.

Regardless of the application volume or spray equipment used, thorough coverage of the foliage is necessary to optimize control results.

All precautions and restrictions should be taken to minimize or eliminate spray drift.

GROUND APPLICATIONS BROADCAST

When making a broadcast application by ground, apply only using nozzles which will deliver coarse or greater (VMD >350 microns) droplets as defined by ASABE S572 standard. Do not apply with a nozzle height greater than 4 feet above the ground or canopy unless necessitated by the application equipment. Apply with the spray boom or nozzle height as low as possible. Do not apply when wind speed is greater than 10 mph. Apply 10 gallons or more of spray per acre; use spray pressures no greater than are required to obtain adequate coverage. The use of drift control additives, shielded sprayers, or other drift control systems can help minimize spray drift. Do not apply during a temperature inversion.

LOW-VOLUME FOLIAR APPLICATION

For low-volume applications, see Table 1 for use rate and mixing instructions. The rate of METHOD 240SL HERBICIDE should be adjusted according to the spray volume per acre and the size and plant density of the target brush species. Refer to the WEEDS CONTROLLED section for application rates. For best results, include a MSO adjuvant at the rate of 1% v/v. Good plant coverage is necessary for best results. Use spray nozzles and pressure that will aid the proper deposition of the spray solution. Apply in sufficient spray volume to help provide uniform spray distribution of spray particles over the area to be treated and to avoid spray drift. Generally, low volume ground applications will require 10 to 25 gallons per acre. The use of an even flat fan tip with a spray angle of 40 degrees or less, such as 4004 or 1504, will aid in proper spray deposition. In addition, cone or straight stream nozzles, such as the 5500 X3 or the 5500 X5 may be used. Use the higher rates for hard to control brush species. Do not apply more than 18 fluid ounces of METHOD 240SL HERBICIDE per acre per year.

Table 1. METHOD 240SL HERBICIDE Mixing Guide for Total Spray Volumes.

Total Spray Volume	Method 240 SL rate per acre (fluid ounces)			
	4	8	12	18
Gallons per acre	Method 240 SL rate per 100 gallons of spray solution (fluid ounces)			
400	1	2	3	4.5
200	2	4	6	9
100	4	8	12	18
50	8	16	24	36
40	10	20	30	45
20	20	40	60	90
10	40	80	120	180

HIGH VOLUME FOLIAR APPLICATION

For high-volume applications, see Table 1 for use rate and mixing instructions. Use the higher rates for hard to control brush species. Refer to the WEEDS CONTROLLED section for application rates. Higher spray volumes may be required for sites with high density brush. Generally, high volume ground applications will require 100 to 400 gallons per acre. Use sufficient spray volume to thoroughly and uniformly wet foliage and stems but don't over apply causing excessive run-off. The spray solution should reach the crown of the plants and trickle down into the canopy.

Do not apply more than 18 fluid ounces of METHOD 240SL HERBICIDE per acre per year.

INDIVIDUAL PLANT TREATMENTS (IPT)

Apply METHOD 240SL HERBICIDE utilizing an application method which targets individual woody species including foliar applications, cut stump and stem treatments, injection or hack and squirt, or basal bark treatments.

FOLIAR

The total spray volume should be adjusted according to the size and density of the target plant species. Where taller/denser vegetation is present, higher spray volumes may be necessary to ensure good coverage. Refer to the WEEDS CONTROLLED section of the label for specific use rate information. For best results include a MSO-type adjuvant at the rate of 1% v/v. Refer to Table 1 for mixing instructions. Spray the vegetation starting at the top and covering the sides. Ensure complete coverage of the plant for best results. Avoid spraying to the point of excessive runoff as injury to desirable species or ground cover may occur. Refer to Low and High – Volume Foliar Application sections above for application use directions and rates.

CUT STUMP/ STEM TREATMENTS

Make a dilute solution by mixing 5 to 10 gallons of METHOD 240SL HERBICIDE in enough basal oil to make 100 gallons of spray mixture, or equivalent ratio. Some basal oils may be incompatible with METHOD 240SL HERBICIDE causing a precipitant to form. Test for compatibility by adding METHOD 240SL HERBICIDE to a small quantity of desired basal oil at the proper ratio, allow to stand for 30 minutes and check for physical incompatibility or precipitates. The addition of an emulsifier may be needed to ensure compatibility. Apply with a sprayer using low pressure and solid cone or flat fan nozzles. Spray the cut surface soon after cutting, thoroughly wetting the cambium layer next to the bark. On larger trees, treat only the outer 2-3 inches of the stump. On trees 3 inches or less in diameter treat the entire cut surface. In addition to the cut surface, treat the sides of the stump/stem and the root collar area to prevent resprouting. Apply anytime except when snow or water prevents treating to the ground line of the stump. Moisture stress may affect optimum control.

INJECTION OR HACK AND SQUIRT

Inject or use a hatchet, machetes, or similar equipment to make downward cuts into the cambium (inner bark) of the stem in such a way as to make a "pocket" large enough to retain the applied solution. Cuts/injections may be made at a height convenient to the applicator. Make one cut/injection for every 2 inches of diameter at breast height (DBH) on the target stem. For example, an 8-inch DBH stem would require 4 cuts. Cuts should be made at equal intervals around the tree. Spray ½ - 1 milliliter (mL) of undiluted METHOD 240SL HERBICIDE into each cut.

BASAL BARK TREATMENTS

Make a dilute solution by mixing 5 to 10 gallons of METHOD 240SL HERBICIDE in enough basal oil to make 100 gallons of spray mixture, or equivalent ratio. Some basal oils may be incompatible with METHOD 240SL HERBICIDE causing a precipitant to form. Test for compatibility by adding METHOD 240SL HERBICIDE to a small quantity of desired basal oil at the proper ratio, allow to stand for 30 minutes and check for physical incompatibility or precipitates. The addition of an emulsifier may be needed to ensure compatibility. Apply with a sprayer using low pressure and solid cone or narrow flat fan nozzles. Make applications to susceptible brush or tree species with stems less than 6 inches in basal diameter. Thoroughly wet the lower 12 to 18 inches of the trunk or stem (from ground line). Treat until run-off at the ground line is noticeable. Brush or trees with old or rough bark will require more spray solution than smooth young bark. Applications can be made anytime of the year except when snow or water prevents treating to the ground line of the brush or tree trunk.

SPECIFIC USE DIRECTIONS CUT STUBBLE TREATMENTS

For the prevention of re-sprouting, after hand cutting or mechanical mowing of susceptible brush species along rights-of-way and other non-crop sites, apply a broadcast application of METHOD 240SL HERBICIDE up to 18 fluid ounces product per acre. Apply in a minimum of 20 gallons of water per acre. Make applications soon after cutting. The addition of a penetrating agent at 5% V/V or more can aid in uptake through the bark or exposed roots of the cut brush. For best results, make applications before or during periods of active root growth. Do not apply when the soil is frozen or covered by standing water or snow.

BAREGROUND

METHOD 240SL HERBICIDE may be used in non-crop sites for bareground (total vegetation control) weed control. Preemergence or post-emergence applications of METHOD 240SL HERBICIDE provide control of many annual and perennial broadleaf weeds. Apply at up to 18 fluid ounces product per acre in tank mixes with other products registered for use on bareground sites. Consult the manufacturer's labels for specific rates, weeds controlled, and use restrictions.

Make a thorough and uniform application with calibrated spray equipment per label directions. Apply at any time of the year. Use the higher rates of METHOD 240SL HERBICIDE for fall applications and in previously untreated areas or areas with high weed infestations. For postemergence applications always include a spray adjuvant. For faster brown-out or burn down results, add glyphosate or similar products to the tank. For added residual weed control, or to broaden the weed control spectrum, tank mix with other residual products registered for use on bareground sites. The level and length of control will depend on the herbicide rate applied, amount of rainfall, soil texture, and environmental and applications conditions.

UNIMPROVED TURFGRASS

METHOD 240SL HERBICIDE may be used in non-crop industrial sites, such as utility rights-of-way and highways/roadsides, for general weed control in established industrial turf grasses. Apply METHOD 240SL HERBICIDE at rates of 4-18 fluid ounces product per acre. Rates exceeding 8 fluid ounces product per acre may result in unacceptable injury to desirable turfgrasses. Treatments made prior to the full green-up stage may delay green-up. Apply METHOD 240SL HERBICIDE by ground equipment only. Use a minimum of 10 gallons of water per acre. The addition of a MSO adjuvant may increase the potential for turf grass injury.

For species not listed below, determine the tolerance of the turfgrass by treating a small area at the desired application rate. Prior to treatment of larger areas, the treated area must be observed for any signs of herbicidal injury during 30 days of normal growing conditions to determine if the treatment is safe to the target species. The user assumes the responsibility for any plant damage or other liability resulting from use of METHO 240SL HERBICIDE on a turfgrass species not listed on this label.

TURFGRASS TYPE	APPLICATION RATE (FLUID OUNCES/ACRE)
Bermudagrass	4 to 8
Bahiagrass	4 to 8
Bluegrass, Kentucky	4 to 8
Tall Fescue	4 to 8
Ryegrass, perennial	4 to 8
Wheatgrass species ¹	4 to 7.5
Smooth brome ¹	4 to 7.5

¹ Injury from higher rates during the season of application may be severe.

Important: Temporary chlorosis (yellowing), reddening, stunting, droopy or twisted grass leaves, and seed head suppression may occur. Do not apply METHOD 240SL HERBICIDE until the grass becomes well established. Do not apply METHOD 240SL HERBICIDE to grass under stress from disease, insects, drought, or other environmental conditions.

RESTORATION AREAS

METHOD 240SL HERBICIDE is labeled for the control of broadleaf weeds and brush, listed in the WEEDS CONTROLLED section, in areas as follows: non-crop areas such as airports, highways/roadsides, railroad, pipeline and utility rights-of-way, sewage disposal areas, industrial areas, such as electrical substations, rail yards or other industrial rock areas, farmyards, fuel storage areas, fence rows, non-irrigation ditch banks, barrier strips, lumberyards, pumping stations and tank farms, restoration areas, natural areas, wildlife management areas, wildlife openings, and wildlife habitats in unimproved industrial turf, on roadsides, airports, industrial sites, or on other similar non-crop sites in order to establish or release desirable introduced or native perennial grass species for site stabilization.

To maximize and extend the weed and brush control provided by METHOD 240SL HERBICIDE, it is critical that other vegetation management practices, including mowing, fertilization, etc., be incorporated into the restoration program to help extend or build on the weed control benefits and promote the growth of introduced or established grasses and/or desirable plants or plant communities.

Unacceptable injury may occur if METHOD 240SL HERBICIDE is applied before the introduced or native perennial grasses are well established. The grass must have a good secondary root system and show good vigor. METHOD® 240SL HERBICIDE may suppress certain established grasses especially when the grass plants are stressed by adverse environmental conditions. Temporary reddening, stunting, droopy or twisted leaves may occur. Do not apply METHOD 240SL HERBICIDE to grass under stress from disease, insects, drought, or other environmental causes.

Apply METHOD 240SL HERBICIDE in the fall, before the soil freezes, or in the spring after the soil thaws. When applied at lower rates, METHOD 240SL HERBICIDE provides short-term control of weeds listed; when applied at higher rates, weed control spectrum is broadened and extended. Do not apply when the soil is frozen.

WEEDS CONTROLLED

Use the higher spray volumes and herbicide rates for heavy weed and brush infestations, hard to control species, and tall brush or dense hardwood canopies. Do not apply more than 18 fluid ounces product broadcast per acre per year.

BROADLEAF WEEDS	Rate (fluid ounces per acre)
Bitter sneezeweed ³	<i>Helenium amarum</i> 4 to 8
Clover, bush	<i>Lespidea sp.</i>
Clover, Dutch (white)	<i>Trifolium repens</i>
Clover, large hop ³	<i>Trifolium campestre</i>
Croton, woolly ³	<i>Croton capitatus</i>
Dandelion, common	<i>Taraxacum officinale</i>
Dogfennel ³	<i>Eupatorium capillifolium</i>
Henbit ³	<i>Lamium amplexicaule</i>
Ironweed, tall	<i>Vernonia gigantea</i>
Lambsquarters, common ³	<i>Chenopodium album</i>

continued

WEEDS CONTROLLED (continued)

Use the higher spray volumes and herbicide rates for heavy weed and brush infestations, hard to control species, and tall brush or dense hardwood canopies. Do not apply more than 18 fluid ounces product broadcast per acre per year.

BROADLEAF WEEDS

Rate (fluid ounces per acre)

Lespedeza, common ³	<i>Kummerowia striata</i>
Lespedeza, hairy ³	<i>Lespedeza hirta</i>
Lespedeza, serecia	<i>Lespedeza cuneata</i>
Lettuce, prickly	<i>Lactuca serriola</i>
Lettuce, tall ³	<i>Lactuca canadensis</i>
Mullein, common	<i>Verbascum thapsus</i>
Mullein, turkey	<i>Eremocarpus setigerus</i>
Ragweed, western	<i>Ambrosia psilostachya</i>
Sida, prickly ³	<i>Sida spinosa</i>
Sowthistle, common	<i>Sonchus oleraceus</i>
Sowthistle, field ³	<i>Sonchus arvensis</i>
Spanish needle ³	<i>Bidens alba</i>
Speedwell ³	<i>Veronica spp.</i>
Starthistle, yellow	<i>Centaurea solstitialis</i>
Sweetclover, yellow ³	<i>Melilotus officinalis</i>
Vervain, blue ³	<i>Verbena hastata</i>
Chicory, wild	<i>Cichorium intybus</i>
Burclover, California	<i>Medicago polymorpha</i>
Cocklebur, common ³	<i>Xanthium strumarium</i>
Common cat's ear	<i>Hypochoeris radicata</i>
Common spikeweed ³	<i>Centromadia pungens</i>
Copperleaf ³	<i>Acalypha spp.</i>
Crownvetch, common ³	<i>Coronilla varia</i>
Cudweed ³	<i>Gnaphalium spp.</i>
Daisy, oxeye ³	<i>Leucanthemum vulgare</i>
Filaree, broadleaf	<i>Erodium botrys</i>
Filaree, redstem	<i>Erodium cicutarium</i>
Filaree, whitestem	<i>Erodium moschatum</i>
Fleabane, hairy	<i>Erigeron bonariensis</i>
Geranium, Carolina ³	<i>Geranium carolinianum</i>
Goldenaster ³	<i>Heterotheca spp.</i>
Hawkweed, orange	<i>Hieracium aurantiacum</i>
Horsenettle, Carolina ³	<i>Solanum carolinense</i>
Knapweed, diffuse	<i>Centaurea diffusa</i>
Knapweed, Russian	<i>Acroptilon repens</i>
Knapweed, spotted	<i>Centaurea stoebe</i>
Kochia (Up to 6 inches) ¹	<i>Kochia scoparia</i>
Marestail/horseweed	<i>Conyza canadensis</i>
Medic ³	<i>Medicago spp.</i>
Milkthistle, blessed	<i>Silybum marianum</i>
Ragweed, common	<i>Ambrosia artemisiifolia</i>
Rush skeletonweed	<i>Chondrilla juncea</i>
Shepherd's-purse	<i>Capsella bursa-pastoris</i>
Spurge, leafy	<i>Euphorbia esula</i>
Surge, nodding ³	<i>Euphorbia nutans</i>
St. John's wort	<i>Hypericum perforatum</i>
Thistle, Canada	<i>Cirsium arvense</i>
Thistle, cotton	<i>Onoopodium acanthium</i>
Thistle, musk	<i>Carduus nutans</i>
Thistle, Russian	<i>Salsola tragus</i>
Toadflax, dalmatian	<i>Linaria dalmatica</i>
Vetch	<i>Vicia spp.</i>
Wild carrot ³	<i>Daucus carota</i>
Willow weed	<i>Epilobium paniculatum</i>
Plantain	<i>Plantago spp.</i>
Aster, whiteheath	<i>Sympyotrichum pilosum</i>
Bindweed, field	<i>Convolvulus arvensis</i>
Burdock, common ³	<i>Arctium minus</i>
Cinquefoil, sulfur	<i>Potentilla recta</i>
Coast fiddleneck	<i>Amsinckia intermedia</i>
Flixweed ³	<i>Descurainia sophia</i>
Fleabane, annual ³	<i>Erigeron annuus</i>
Goldenrod, Canada ³	<i>Solidago canadensis</i>
Goldenrod, common ³	<i>Solidago virgaurea</i>
Gumweed, curlycup ³	<i>Grindelia squarrosa</i>
Hemlock, poison	<i>Conium maculatum</i>
Honeysuckle, Japanese	<i>Lonicera japonica</i>
Matchweed ³	<i>Mat lippia</i>
Medusahead	<i>Taeniatherum caput-medusae</i>
Poison-ivy, eastern	<i>Toxicodendron radicans</i>
Ragweed, giant ³	<i>Ambrosia trifida</i>
Teasel, common	<i>Dipsacus fullonum</i>
Yarrow, common	<i>Achillea millefolium</i>

continued

WEEDS CONTROLLED (continued)

Use the higher spray volumes and herbicide rates for heavy weed and brush infestations, hard to control species, and tall brush or dense hardwood canopies. Do not apply more than 18 fluid ounces product broadcast per acre per year.

BRUSH

		Rate (fluid ounces per acre)
American beautyberry ³	<i>Callicarpa americana</i>	
Ash (Green, White)	<i>Fraxinus spp.</i>	
Aspen, quaking ³	<i>Populus tremuloides</i>	
Autumn Olive ³	<i>Elaeagnus umbellata</i>	
Baccharis, Eastern ³	<i>Baccharis halimifolia</i>	
Brazilian pepper ³	<i>Schinus terebinthifolius</i>	
Callery Pear ³	<i>Pyrus calleryana</i>	
Catalpa, northern	<i>Catalpa speciosa</i>	
Cherry ³	<i>Prunus spp.</i>	
Chinaberry ³	<i>Melia azedarach</i>	
Chinese tallowtree ³	<i>Triadica sebifera</i>	
Cottonwood	<i>Populus deltoides</i>	
Elder, box	<i>Acer negundo</i>	
Elm, American	<i>Ulmus americana</i>	
Grape, fox ³	<i>Vitis labrusca</i>	
Grape, crimson gloryvine ³	<i>Vitis coignetiae</i>	
Grape, wild	<i>Vitis rotundifolia</i>	
Hackberry, common	<i>Celtis occidentalis</i>	
Lantana, largeleaf ³	<i>Lantana camara</i>	
Locust, black	<i>Robinia pseudoacacia</i>	
Locust, honey	<i>Gleditsia triacanthos</i>	
Maple, red	<i>Acer rubrum</i>	
Maple, silver	<i>Acer saccharinum</i>	
Persimmon, common ³	<i>Diospyros virginiana</i>	
Pine,loblolly ³	<i>Pinus taeda</i>	
Poplar, yellow	<i>Liriodendron tulipifera</i>	
Sugarberry	<i>Celtis laevigata</i>	
Sumac	<i>Rhus spp.</i>	
Sycamore	<i>Acer pseudoplatanus</i>	
Tupelo, black	<i>Nyssa sylvatica</i>	
Willow	<i>Salix spp.</i>	
Blackberry/Dewberry ³	<i>Rubus spp.</i>	
Buckthorn, common ³	<i>Rhamnus carthartica</i>	
Oak, northern red	<i>Quercus borealis</i>	
Pine, Virginia ²	<i>Pinus virginiana</i>	16
Sassafras	<i>Sassafras albidum</i>	
Huisache	<i>Acacia farnesiana</i>	
Lotebush ³	<i>Ziziphus obtusifolia</i>	
Mesquite	<i>Prosopis juliflora</i>	18

¹See specific weed directions.

²Suppression: a visual reduction in weed competition (reduced population or vigor) as compared to an untreated area.

³Not for use in California.

Specific Weed Directions:

Kochia: For non-selective applications, tank mixing glyphosate with METHOD 240 SL HERBICIDE may improve control under dry conditions.

Cogongrass: In highways/roadsides turfgrass sites, apply METHOD 240SL HERBICIDE at a minimum rate of 8 fluid ounces per acre for seedhead suppression of cogongrass. For suppression of vegetative growth, apply 16 to 18 fluid ounces per acre. The addition of imazapry may improve control. For best results, make applications in the fall, prior to frost. Note: cogongrass biotypes may differ in their response to applications of METHOD 240SL HERBICIDE.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store product in original container only. Store in a cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons):

Nonfillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and

continued

STORAGE AND DISPOSAL *(continued)*

roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom, and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration, and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour, or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

All Refillable Containers: Refillable container. Refilling Container: Refill this container with METHOD 240SL HERBICIDE containing aminocyclopyrachlor potassium salt only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use container; contact BAYER CROPSOURCE LP at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact BAYER CROPSOURCE LP at the number below for instructions. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom, and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration, and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour, or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling, if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling, if available, or reconditioning, if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Do not transport if container is damaged or leaking. If the container is damaged, leaking, or obsolete, or in the event of a major spill, fire, or other emergency, contact BAYER CROPSOURCE LP at 1-800-334-7577, day or night.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSOURCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSOURCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSOURCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Bayer (reg'd), the Bayer Cross (reg'd) and Method® are registered trademarks of Bayer.

For product information call: 1-800-331-2867

Produced for:

Bayer Environmental Science
A Division of Bayer CropScience LP
5000 CentreGreen Way, Suite 400
Cary, NC 27513

Bayer

**DO NOT USE PLANT MATERIAL TREATED WITH METHOD® 240SL
HERBICIDE FOR MULCH OR COMPOST**



Method® 240SL HERBICIDE

**Soluble Liquid
For Non-Crop Use**

ACTIVE INGREDIENT: By Weight

Potassium salt of aminocyclopyrachlor
Potassium salt of 6-amino-5-chloro-2-

cyclopropy-4-pyrimidinecarboxylic acid* 25%

OTHER INGREDIENTS: 75%

TOTAL: 100%

*Acid Equivalent: 6-Amino-5-chloro-2-cyclopropy-4-pyrimidinecarboxylic acid - 2 pounds acid per gallon or 21.2%

EPA Reg. No. 432-1565

KEEP OUT OF REACH OF CHILDREN CAUTION

Not for sale, sale into, distribution, and/or use in Nassau and Suffolk counties of New York State.

See Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

FIRST AID

If in eyes:	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
-------------	--

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Mixers, loaders, and applicators must wear long-sleeved shirt and long pants, shoes plus socks. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Surface Water Advisory

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of aminocyclopyrachlor from runoff water and sediment. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

Ground Water Advisory

Aminocyclopyrachlor has properties and characteristics associated with chemicals detected in ground water. This chemical may leach into ground water if used in areas where soils are permeable, particularly where the water table is shallow.

**Nonrefillable Container
Net Contents**

2.5 Gallons

84099295 84942561D 200928AV1

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

Pesticide Storage: Store product in original container only. Store in a cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Equal to or Less Than 5 Gallons):

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinse into application equipment or a mix tank or store rinse for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers (Capacity Greater Than 5 Gallons): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container over its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinse into application equipment or a mix tank or store rinse for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Rigid Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom, and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration, and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour, or pump rinse into application equipment or rinse collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

Do not transport if container is damaged or leaking. If the container is damaged, leaking, or obsolete, or in the event of a major spill, fire, or other emergency, contact BAYER CROPSCIENCE LP at 1-800-334-7577, day or night.

Bayer (reg'd), the Bayer Cross (reg'd) and Method® are registered trademarks of Bayer.

Produced for:

Bayer Environmental Science
A Division of Bayer CropScience LP
5000 CentreGreen Way, Suite 400
Cary, NC 27513

Bayer

(01) 10785740186012

Bayer Environmental Science

SAFETY DATA SHEET



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

1/8
Revision Date: 09/02/2015
Print Date: 11/18/2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name METHOD® 240SL HERBICIDE

Product code (UVP) 84117099

SDS Number 102000030323

EPA Registration No. 432-1565

Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Other hazards

No particular hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name
Aminocyclopyrachlor

CAS-No.
858956-08-8

Concentration % by weight
21.2



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

2/8

Revision Date: 09/02/2015
Print Date: 11/18/2015

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	No symptoms known or expected.
-----------------	--------------------------------

Indication of any immediate medical attention and special treatment needed

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.
------------------	---

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Water spray, Foam, Dry chemical, Carbon dioxide (CO ₂)
-----------------	--

Unsuitable	None known.
-------------------	-------------

Advice for firefighters

Special protective equipment for fire-fighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
---	--

Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
----------------------------	--

Flash point	> 100 °C
--------------------	----------

Autoignition temperature	no data available
---------------------------------	-------------------

Lower explosion limit	no data available
------------------------------	-------------------

Upper explosion limit	no data available
------------------------------	-------------------

Bayer Environmental Science

SAFETY DATA SHEET



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

3/8

Revision Date: 09/02/2015
Print Date: 11/18/2015

Explosivity not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Do not allow to enter soil, waterways or waste water canal.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle and open container in a manner as to prevent spillage. Use only in area provided with appropriate exhaust ventilation.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No control parameters known.

Exposure controls

Bayer Environmental Science

SAFETY DATA SHEET



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

4/8

Revision Date: 09/02/2015
Print Date: 11/18/2015

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.
Hand protection	Chemical resistant nitrile rubber gloves
Eye protection	Chemical resistant goggles must be worn.
Skin and body protection	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	brown
Physical State	liquid, clear
Odor	characteristic
Odour Threshold	no data available
pH	6.9 at 1 %
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.13 g/cm ³
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	soluble
Minimum Ignition Energy	not applicable
Decomposition temperature	not applicable
Partition coefficient: n-octanol/water	no data available
Viscosity	no data available
Flash point	> 100 °C
Autoignition temperature	no data available
Lower explosion limit	no data available

Bayer Environmental Science

SAFETY DATA SHEET



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

5/8

Revision Date: 09/02/2015
Print Date: 11/18/2015

Upper explosion limit	no data available
Explosivity	not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	not applicable
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	no data available
Incompatible materials	no data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Immediate Effects

Eye	Moderate eye irritation.
------------	--------------------------

Information on toxicological effects

Acute oral toxicity	LD50 (rat) > 5,000 mg/kg
Acute inhalation toxicity	LC50 (rat) > 6.9 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (rat) > 5,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	Moderate eye irritation. (rabbit)
Sensitisation	Non-sensitizing. (mouse)

ACGIH

None.

NTP

None.

IARC

None.

Bayer Environmental Science

SAFETY DATA SHEET



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

6/8

Revision Date: 09/02/2015
Print Date: 11/18/2015

OSHA

None.

Further information

Only acute toxicity studies have been performed on the formulated product.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) > 119 mg/l
Exposure time: 96 h

Chronic toxicity to fish Oncorhynchus mykiss (rainbow trout)
NOEC: 11 mg/l
Exposure time: 90 d

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) 43 mg/l
Exposure time: 96 h

Chronic toxicity to aquatic invertebrates NOEC (Daphnia magna (Water flea)): 6 mg/l
Exposure time: 21 d

Toxicity to aquatic plants EC50 (Anabaena flos-aquae (cyanobacterium)) > 7.4 mg/l
Exposure time: 72 h

EC50 (Anabaena flos-aquae (cyanobacterium)) > 119 mg/l
Exposure time: 96 h

Environmental precautions Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Do not contaminate water, food, or feed by disposal.
Dispose in accordance with all local, state/provincial and federal regulations.
Follow advice on product label and/or leaflet.

Contaminated packaging Do not re-use empty containers.
Triple rinse containers.

Bayer Environmental Science

SAFETY DATA SHEET



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

7/8

Revision Date: 09/02/2015
Print Date: 11/18/2015

Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning.
If burned, stay out of smoke.

Follow advice on product label and/or leaflet.

RCRA Information

Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1565

US Federal Regulations

TSCA list

None.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None.

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

Bayer Environmental Science

SAFETY DATA SHEET



METHOD® 240SL HERBICIDE

Version 2.0 / USA
102000030323

8/8

Revision Date: 09/02/2015
Print Date: 11/18/2015

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Moderate eye irritation.
Avoid contact with eyes.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
CAS-Nr.	Chemical Abstracts Service number
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	US. IARC Monographs on Occupational Exposures to Chemical Agents
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: New Safety Data Sheet.

Revision Date: 09/02/2015

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.



HERBICIDE

Oust[®] EXTRA

GROUP 2 HERBICIDE

Dispersible Granules

Active Ingredient

Sulfometuron-methyl

By Weight

{Methyl 2-[[[[(4,6-dimethyl-2-pyrimidinyl)amino]-carbonyl]amino]sulfonyl]benzoate} 56.25%

Metsulfuron-methyl

Methyl 2-[[[[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]-carbonyl]amino]sulfonyl]benzoate 15.00%

Other Ingredients 28.75%

Total 100%

EPA Reg. No. 432-1557

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

Nonrefillable Container

Net Weight

4 Pounds

85787128

85805304E 180308AV3

See Back Panel for First Aid Instructions and Booklet for Complete Precautionary Statements and Directions for Use.

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.
(If you do not understand this label, find someone to explain it to you in detail.)

FIRST AID

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Have the product container label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

All mixers, loaders applicators and other handlers must wear:

Long-sleeved shirt and long pants

Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Control Statement: Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240(d)(6)].

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in Worker

Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing.

As soon as possible, wash thoroughly and change into clean clothing.

Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If no such instructions for washables exist, use detergent and hot water.

ENVIRONMENTAL HAZARDS

For terrestrial uses, except under the forest canopy, do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters or rinsate.

This herbicide is injurious to plants at extremely low concentrations. Nontarget plants may be adversely effected from drift and run-off.

Exposure to OUST[®] EXTRA HERBICIDE can injure or kill plants. Damage to susceptible plants can occur when soil particles are blown or washed off target onto cropland. Sulfometuron-methyl and metsulfuron-methyl are known to leach through soil into groundwater under certain conditions as a result of label use. These chemicals may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of sulfometuron-methyl from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

DIRECTIONS FOR USE

It is a violation of federal law to use this product in a manner inconsistent with its labeling.

OUST EXTRA HERBICIDE must be used only in accordance with instructions on this label or in BAYER CROPSCIENCE LP supplemental labeling.

BAYER CROPSCIENCE LP will not be responsible for losses or damages resulting from the use of this product in any manner not specifically instructed by BAYER CROPSCIENCE LP. User assumes all risks associated with such non-labeled use to the extent consistent with applicable law.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency in your State responsible for pesticide regulation.

MANDATORY SPRAY DRIFT REQUIREMENTS

Aerial Applications:

- Do not release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- Applicators are required to use an Extremely Coarse or Coarser droplet size (ASABE S572.1) for all applications.
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Ground Boom Applications:

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or target vegetation, unless making an industrial turf application, in which case applicators may apply with a nozzle height no more than 4 feet above the crop or target vegetation.

(continued)

MANDATORY SPRAY DRIFT REQUIREMENTS *(continued)*

- Applicators are required to use an Extremely Coarse or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

Boom-less Ground Applications:

- Applicators are required to use an Extremely Coarse or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

SPRAY DRIFT ADVISORIES

Boom-less Ground Applications:

- Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

Handheld Technology Applications:

- Take precautions to minimize spray drift.

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size – Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size – Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

BOOM HEIGHT – Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

NON-TARGET ORGANISM ADVISORY

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further

guidance and instructions on how to minimize spray drift, refer to the Spray Drift Management section of this label.

WINDBLOWN SOIL PARTICLES RESTRICTION

Applications may not be made to soil that is subject to wind erosion when less than a 60% chance of rainfall is predicted to occur in the treatment area within 48 hours. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions. Soils with low organic matter also tend to be prone to wind erosion.

Maximum Rate - Annual

- Do not apply more than 10 2/3 ounces OUST EXTRA HERBICIDE per acre per year*.
- Do not apply more than 0.375 pounds of the active ingredient sulfometuron-methyl per acre per year when using any combination of products containing sulfometuron-methyl.
- Do not apply more than 0.15 pounds of the active ingredient metsulfuron-methyl per acre per year when using any combination of products containing metsulfuron-methyl.
- Do not apply more than two applications per year for all uses with a minimum of 30 days between applications.

* 10 2/3 ounces OUST EXTRA HERBICIDE contains 0.375 pounds of the active ingredient sulfometuron-methyl and 0.10 pounds active ingredient metsulfuron-methyl.

Maximum Rate – Single Application on an Agricultural site

- Do not apply more than 5 2/3 ounces OUST EXTRA HERBICIDE per acre*.
- Do not apply more than 0.199 pounds of the active ingredient sulfometuron-methyl per acre when using any combination of products containing sulfometuron-methyl.

* 5 2/3 ounces OUST EXTRA HERBICIDE contains 0.199 pounds of the active ingredient sulfometuron-methyl and 0.053 pounds of the active ingredient metsulfuron-methyl.)

Maximum Rate – Single Application on a Non-Agricultural site

- Do not apply more than 8 ounces OUST EXTRA HERBICIDE per acre*.
- Do not apply more than 0.281 pounds of the active ingredient sulfometuron-methyl per acre when using any combination of products containing sulfometuron-methyl.

* 8 ounces OUST EXTRA HERBICIDE contains 0.281 pounds of the active ingredient sulfometuron-methyl and 0.075 pounds of the active ingredient metsulfuron-methyl.

PRODUCT INFORMATION

OUST EXTRA HERBICIDE is a dispersible granule that is mixed in water and applied as a spray or impregnated on dry, bulk fertilizer. OUST EXTRA HERBICIDE controls many annual and perennial grasses and broadleaf weeds in conifer plantations and non-crop sites. It also may be used to control certain hardwoods and vines when applied in site preparation treatments.

OUST EXTRA HERBICIDE may be used for general weed control on terrestrial non-agricultural sites and for selective weed control in certain types of industrial turfgrasses on these same sites. OUST EXTRA HERBICIDE may be used for the control of certain woody plants, vines, and herbaceous weeds in site preparation and release of various conifers. OUST EXTRA HERBICIDE can be tank mixed with other herbicides registered for use in conifer plantations and non-crop sites; when tank mixing, use the most restrictive limitations from the labeling of both products. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Herbaceous weed are controlled by both preemergence and postemergence activity. The best results are obtained when the application is made before or during the early stages of weed growth before weeds develop an established root system. Moisture is required to move OUST EXTRA HERBICIDE into the root zone of weeds for preemergence control. The best results on undesirable hardwoods and vines are obtained with a foliar spray between full leaf expansion in the spring and normal defoliation in the fall. This product may be applied on conifer plantations and non-crop sites that contain areas of temporary surface water caused by collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. It is permissible to treat intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present. It is also permissible to treat marshes, swamps and bogs after water has receded, as well as seasonally dry flood deltas. Do not make applications to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals.

In the application of OUST EXTRA HERBICIDE, a drift control agent may be used per the manufacturer's guideline.

OUST EXTRA HERBICIDE is noncorrosive, nonflammable, nonvolatile, and does not freeze.

For best postemergence results, apply OUST EXTRA HERBICIDE to young, actively growing weeds. The use rate depends upon the weed species, weed size at application, and soil texture. The degree and duration of control may depend on the following:

- weed spectrum and infestation intensity
- weed size at application
- environmental conditions at and following treatment
- soil pH, soil moisture, and soil organic matter

Use a high rate on established plants and on fine-textured soils and a lower rate on smaller weeds and coarse-textured soils.

ENVIRONMENTAL CONDITIONS AND BIOLOGICAL ACTIVITY

When applied as a spray, OUST EXTRA HERBICIDE is absorbed by both the roots and foliage of plants, rapidly inhibiting the growth of susceptible weeds. When applied on dry fertilizer, OUST EXTRA HERBICIDE is absorbed primarily by the roots. Two to 3 weeks after application to weeds, leaf growth slows, and the growing points turn reddish-purple. Within 4 to 6 weeks of application, leaf veins and leaves become discolored, and the growing points subsequently die.

Warm, moist conditions following application accelerate the herbicidal activity of OUST EXTRA HERBICIDE; cold, dry conditions delay the herbicidal activity. In addition, undesirable hardwoods, vines and weeds hardened-off by drought stress are less susceptible to OUST EXTRA HERBICIDE. Moisture is needed to move OUST EXTRA HERBICIDE into the soil for preemergence weed control.

INVASIVE SPECIES MANAGEMENT

This product may be considered for use on public, private, and tribal lands to treat certain weed species infestations that have been determined to be invasive, consistent with the Federal Interagency Committee for the Management of Noxious and Exotic Weeds (FICMNEW) National Early Detection and Rapid Response (EDRR) System for invasive plants. Effective EDRR systems address invasions by eradicating the invader where possible, and controlling them when the invasive species is too established to be feasibly eradicated. Once an EDRR assessment has been completed and action is recommended, a Rapid Response needs to be taken to quickly contain, deny reproduction, and if possible eliminate the invader. Consult your appropriate state extension service, forest service, or regional multidisciplinary invasive species management coordination team to determine the appropriate Rapid Response provisions and allowed treatments in your area.

WEED RESISTANCE MANAGEMENT

OUST EXTRA HERBICIDE contains the active ingredients sulfometuron-methyl and metsulfuron-methyl which are Group 2 Herbicides based on the mode of action classification system of the Weed Science Society of America. When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field,

naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected.

Follow the best management practices listed below to delay the development of herbicide resistant weeds.

- Fields should be scouted prior to application to identify the weed species present and their growth stage to determine if the intended application will be effective. Fields should be scouted after application to verify that the treatment was effective.
- Identify weeds present in the field through scouting and field history and understand their biology. The weed-control program should consider all of the weeds present.
- Suspected herbicide-resistant weeds may be identified by these indicators:
 - o Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
 - o A spreading patch of non-controlled plants of a particular weed species; and
 - o Surviving plants mixed with controlled individuals of the same species.
- Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of actions for each target weed.
- Report any incidence of non-performance of this product against a particular weed species to your Bayer distributor, Bayer representative or call 1-800-331-2867.
- If resistance is suspected, treat weed escapes with an herbicide having a different mechanism of action and/or use non-chemical means to remove escapes, as practical, with the goal of preventing further seed production.
- Use a diversified approach toward weed management. Whenever possible incorporate multiple weed-control practices such as mechanical cultivation, biological management practices, and crop rotation.
- To the extent possible, do not allow weed escapes to produce seeds, roots, or tubers.
- Difficult to control weeds may require sequential applications of herbicides with differing mechanisms of action.
- Apply this herbicide at the correct timing and rate needed to control the most difficult weeds in the field.
- Use a broad spectrum soil-applied herbicide with a mechanism of action that differs from this product as a foundation in a

weed-control program.

- Do not use more than two applications of this or any other herbicide with the same mechanism of action within a single growing season unless mixed with an herbicide with another mechanism of action with an overlapping spectrum for the difficult-to-control weeds.

INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

PREPARING FOR USE – Site Specific Considerations

Understanding the risks associated with the application of OUST EXTRA HERBICIDE is essential to aid in preventing off-site injury to desirable vegetation and agricultural crops. The risk of off-site movement both during and after application may be affected by a number of site specific factors such as the nature, texture and stability of the soil, the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, drainage patterns, and other local physical and environmental conditions. A careful evaluation of the potential for off-site movement from the intended application site, including movement of treated soil by wind or water erosion, must be made prior to using OUST EXTRA HERBICIDE. This evaluation is particularly critical where desirable vegetation or crops are grown on neighboring land for which the use of OUST EXTRA HERBICIDE is not labeled. If prevailing local conditions may be expected to result in off-site movement and cause damage to neighboring desirable vegetation or agricultural crops, do not apply OUST EXTRA HERBICIDE.

Before applying OUST EXTRA HERBICIDE the user must read and understand all label directions, precautions and restrictions completely, including these requirements for a site specific evaluation. If you do not understand any of the instructions or precautions on the label, or are unable to make a site specific evaluation yourself, consult your local agricultural dealer, cooperative extension service, land managers, professional consultants, or other qualified authorities familiar with the area to be treated. If you still have questions regarding the need for site specific considerations, please call 1-800-331-2867.

AGRICULTURAL USES

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

Coveralls

Chemical resistant gloves made of any waterproof material

Shoes plus socks

CONIFER PLANTATIONS

APPLICATION INFORMATION

When applied as a spray, OUST EXTRA HERBICIDE controls certain undesirable woody plants, vines and many broadleaf weeds and grasses in conifer plantation sites. Apply sprays by ground equipment or by helicopter. Apply impregnated fertilizer by ground equipment or by air (helicopter or fixed wing aircraft) to control broadleaf weeds and grasses.

When applied as a spray, OUST EXTRA HERBICIDE controls woody plants and vines by postemergent foliar activity. The best results are obtained with a foliar spray between full leaf expansion in the spring and normal defoliation in the fall.

OUST EXTRA HERBICIDE may be tank mixed with other herbicides registered for use in conifer plantations; when tank mixing use the most restrictive limitations from the labels of both products. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use

on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

APPLICATION TIMING

To control broadleaf weeds and grasses, apply OUST EXTRA HERBICIDE sprays before herbaceous weeds emerge or shortly thereafter. Apply impregnated fertilizer before weeds emerge.

APPLICATION RATES

Apply OUST EXTRA HERBICIDE at the rates indicated by conifer species. Use a lower rate on coarse-textured soils (i.e., loamy sands, sandy loams) and a higher rate on fine textured soils (i.e. sandy clay loams and silty clay loams).

WEEDS CONTROLLED

OUST EXTRA HERBICIDE effectively controls or suppresses the weeds and vines listed under the WEEDS CONTROLLED in the NON-AGRICULTURAL USE section of this label when applied at the rates specified.

CONIFER SITE PREPARATION

APPLICATION BEFORE TRANSPLANTING

Make all applications before transplanting to control specified hardwoods, vines, broadleaf weeds and grasses. To improve control of targeted pests, add a surfactant at the rate specified on the manufacturer's label or as limited by the companion product (tank mixtures) label.

USE RATES FOR SELECTED SPECIES

USE RATES BEFORE TRANSPLANTING CONIFERS

Species	Rate ounces/acre	When to Transplant into Treated Areas
Loblolly Pine	3 to 5 1/3	Planting season following application
Longleaf Pine	3 to 4*	Planting season following application
Slash Pine	3 to 4	Planting season following application
Black Spruce	2 2/3 to 5 1/3	Not less than 13 months following application
Red Pine	1 1/3 to 2 2/3	The following spring or summer but not less than 3 months after application. Areas receiving 2/3 to 1 1/3 oz/acre may be transplanted in a min. of

Douglas Fir	2 2/3 to 5 1/3	30 days following application Planting season following application
Sitka Spruce	2 2/3 to 5 1/3	Planting season following application
Western Hemlock	2 2/3 to 5 1/3	Planting season following application
Ponderosa Pine	2 2/3 to 5 1/3	Arid regions: Apply in fall and plant the next spring West of Cascades: Planting season following application
Western Red Cedar	2.0 to 3.0	Planting season following application
Grand Fir	2.0 to 3.0	Planting season following application

Other species of conifers may be planted providing the user has experience indicating acceptable crop safety to OUST EXTRA HERBICIDE. Without prior experience, it is advised that small area plantings be tested for crop safety to OUST EXTRA HERBICIDE before large scale plantings are made. The user accepts all responsibility for injury on any conifer species not listed above to the extent consistent with applicable law.

TANK MIXTURES

South/Southeast US

OUST EXTRA HERBICIDE may be tank mixed with site preparation treatments applied beginning in the late summer to broaden the spectrum of undesirable hardwoods controlled and provide herbaceous weed control in the year following transplanting. The list of herbicides that can be tank mixed with OUST EXTRA HERBICIDE include but is not limited to ESPLANADE® F, glyphosate, imazapyr, and triclopyr. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

IMPROVED BRUSH CONTROL Following a spring VELPAR® DF VU HERBICIDE, or VELPAR® L VU HERBICIDE application, a tank mixture of OUST EXTRA HERBICIDE at 4 ounces per acre plus imazapyr will provide improved brush control. A minimum of 2.5 ounces of active ingredient imazapyr (isopropylamine salt) per acre will provide improved brush control.

These brush species include but are not limited to:

American beautyberry *Callicarpa americana*

Southern dewberry *Rubus* spp

Huckleberry *Vaccinium* spp.

Application must be made in the summer or fall following a spring application of VELPAR DF VU HERBICIDE, or VELPAR L VU HERBICIDE. For best results make the application after brush species have completely defoliated twice following the VELPAR DF VU HERBICIDE, or VELPAR L VU HERBICIDE application and refoliation of target brush species is evident.

OUST EXTRA HERBICIDE applied at this time will provide herbaceous weed control into the early growing season of the year following application. This treatment also targets brush species remaining after a spring VELPAR DF VU HERBICIDE, or VELPAR L VU HERBICIDE application.

Loblolly, slash, and longleaf pine may be transplanted the planting season following application.

Where burning is desired, burn only after adequate rainfall has occurred to move OUST EXTRA HERBICIDE into the soil. Soil disturbance from bedding or plowing may reduce spring herbaceous weed control.

CONIFER RELEASE

APPLICATION AFTER TRANSPLANTING

Apply OUST EXTRA HERBICIDE after transplanting to control certain species of hardwoods, broadleaf weeds and grasses as listed in the Weeds Controlled list in the Non-Crop section of this label.

USE RATES FOR SELECTED SPECIES

Use Rates After Transplanting Conifers

Species	Rate (ounces/acre)
Loblolly Pine	2 2/3 to 4
Slash Pine	2 2/3 to 3

TANK MIXTURES

HERBACEOUS WEED CONTROL

For loblolly pines, apply OUST EXTRA HERBICIDE at 2 to 4 ounces per acre plus imazapyr (4 pound active per gallon) at 4 to 6 fluid ounces per acre.

For slash pines, apply OUST EXTRA HERBICIDE at 2 ounces per acre plus imazapyr at 4 fluid ounces per acre.

This tank mixture controls:

Common ragweed

Dogfennel

Fireweed

Late boneset

Panicgrass

Pokeweed

In addition to the herbaceous weeds listed, this tank mixture will aid in the suppression of perennial grasses, such as, bermuda-grass and johnsongrass.

UNDESIRABLE HARDWOOD CONTROL

BROADCAST APPLICATIONS

For loblolly pine, apply 4 ounces of OUST EXTRA HERBICIDE with 8 to 16 fluid ounces of imazapyr (4 pound active per gallon) per acre to control herbaceous weeds, grasses and undesirable hardwoods. Some minor conifer growth inhibition may be observed when release treatments are made during periods of active conifer growth. To minimize potential conifer height growth inhibition, broadcast release treatments may be made late in the growing season.

For slash pine, over the top broadcast release treatments must be made after mid-August and only in stands 2 to 5 years old. Apply 3 to 4 ounces of OUST EXTRA HERBICIDE with 8 to 12 fluid ounces of imazapyr (4 lbs a.i. per gallon) per acre to suppress undesirable hardwoods and control herbaceous weeds and grasses. For over the top applications to slash pine do not add a surfactant.

For understory applications OUST EXTRA HERBICIDE may be tank mixed with any herbicide product registered for use on the site. The list of herbicides that can be tank mixed with OUST EXTRA HERBICIDE include but is not limited to ESPLANADE F, glyphosate, imazapyr and triclopyr. In addition to loblolly and slash, stands of other conifer species may be treated providing the user has experience indicating acceptable crop safety to OUST EXTRA HERBICIDE. Without prior experience it is advised that a small area be tested for crop safety to OUST EXTRA HERBICIDE before large scale applications are made. The user accepts all responsibility for injury on any conifer species noted above to the extent consistent with applicable law.

FERTILIZER IMPREGNATION

Dry bulk fertilizer may be impregnated or coated with OUST EXTRA HERBICIDE for application in the establishment of conifer plantations.

IMPREGNATION

To impregnate the fertilizer, use a system consisting of a conveyor or closed drum used to blend dry bulk fertilizer. Some fertilizers such as potassium nitrate, sodium nitrate and triple super phosphate are not compatible with OUST EXTRA HERBICIDE. Diammonium phosphate, potassium chloride, 16-16-16 and 24-4-4 have been used successfully. Do not use OUST EXTRA HERBICIDE on limestone.

If fertilizer materials are excessively dusty, use a suitable additive to reduce dust prior to impregnation. Dusty fertilizer may result in poor distribution and excessive risk of drift during application. The dry fertilizer must be properly impregnated and uniformly applied to avoid potential tree injury or mortality and poor weed control.

Consult the Application Rates section of this label for the appropriate rate of OUST EXTRA HERBICIDE to be used per acre. Apply this amount of OUST EXTRA HERBICIDE to the volume of fertilizer to be applied per acre. To impregnate dry bulk fertilizer, mix the amount of OUST EXTRA HERBICIDE as prescribed above in a sufficient quantity of water to uniformly coat the desired amount of fertilizer. Suspensions of OUST EXTRA HERBICIDE will require thorough agitation. Direct the spray nozzles to deliver a fine spray of the mixture toward the fertilizer for uniform coverage. The use of a colorant may be beneficial to visually determine the uniformity of impregnation.

Impregnation of OUST EXTRA HERBICIDE to dry bulk fertilizer may vary. If absorption of the impregnating spray by the fertilizer is not adequate, the use of an absorptive powder or additive, such as Microcel E (Johns Manville Product Company) or HiSil - 233 (Pittsburg Plate Glass) may be required to produce a dry, free-flowing mixture.

Apply impregnated fertilizer as soon as possible after impregnation for optimum performance. Impregnated fertilizer may become lumpy and difficult to apply following storage. Uniform and precise application of the fertilizer impregnated with OUST EXTRA HERBICIDE is essential for satisfactory weed control and to minimize tree injury.

Follow the instructions for spray tank cleanout on this label for cleaning the equipment used to impregnate, transport, and apply the fertilizer.

Low rates of OUST EXTRA HERBICIDE can kill or severely injure most crops. Following a OUST EXTRA HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which OUST EXTRA HERBICIDE or its active ingredients are not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

BROADCAST APPLICATION

Applications may be made by ground or air (helicopter or fixed wing aircraft). Accurate calibration of the application equipment is essential for uniform distribution on the soil surface. Overlaps or skips between adjoining swaths or non-uniform distribution of impregnated fertilizer within the swath will deliver poor results and may result in tree injury or mortality.

USE RESTRICTIONS CONIFER PLANTATIONS

- Do not apply OUST EXTRA HERBICIDE to conifers grown for Christmas trees or ornamentals.
- Do not use a surfactant with OUST EXTRA HERBICIDE for herbaceous weed control when making over the top applications to conifer seedlings in the spring after transplanting. A surfactant specifically registered for conifer release may be used when targeting specific weed problems, such as, undesirable hardwoods. Refer to the surfactant label for use rates.
- Do not apply more than 10 2/3 ounces OUST EXTRA HERBICIDE per acre per year (contains 0.375 pounds sulfometuron-methyl and 0.10 pounds metsulfuron-methyl.)
- Do not apply more than 5 2/3 ounces OUST EXTRA HERBICIDE per acre per single application to an Agricultural site (contains 0.199 pounds sulfometuron-methyl and 0.053 pounds of metsulfuron-methyl).
- Do not apply more than two applications per year for all uses with a minimum of 30 days between applications.

USE PRECAUTIONS CONIFER PLANTATIONS

- Applications of OUST EXTRA HERBICIDE made to conifers that are suffering from loss of vigor caused by insects, diseases, drought, winter damage, animal damage, excessive soil moisture, planting shock, previous agricultural practices, or other stresses, may injure or kill the trees.
- After transplanting, apply OUST EXTRA HERBICIDE only after adequate rainfall has closed the planting slit and settled the soil around the roots of the pine seedlings.
- OUST EXTRA HERBICIDE applications may result in damage and mortality to other species of trees when they are present on sites with those listed in the preceding instructions for conifer plantations uses.

HYBRID POPLAR PLANTATIONS NEW MEXICO

SITE PREPARATION: APPLICATION BEFORE TRANSPLANTING

For hybrid poplar, apply 1 to 3 ounces per acre of OUST EXTRA HERBICIDE. Use 2 to 3 ounces per acre of OUST EXTRA HERBICIDE for heavy weed infestations and where maximum residual control is desired. Use 1 to 2 ounces per acre of OUST EXTRA HERBICIDE for light weed infestations or when small diameter cuttings have been planted. Allow a minimum of 3 days between application and planting. Limit the first use to a small area to determine the selectivity of OUST EXTRA HERBICIDE on specific clones. OUST EXTRA HERBICIDE must be activated by rainfall or overhead irrigation before weeds become well established. Use of OUST EXTRA HERBICIDE may cause temporary chlorosis (yellowing) or a small reduction in tree height during the year of use.

RELEASE: APPLICATION AFTER TRANSPLANTING

For hybrid poplar, apply 1 to 3 ounces per acre of OUST EXTRA HERBICIDE. Use 2 to 3 ounces per acre of OUST EXTRA HERBICIDE for heavy weed infestations and where maximum residual control is desired. Use 1 to 2 ounces per acre of OUST EXTRA HERBICIDE for light weed infestations or when small diameter cuttings have been planted.

SPECIFIC WEED PROBLEMS KOCHIA AND RUSSIAN THISTLE

Since biotypes of kochia and Russian thistle are known to be resistant to OUST EXTRA HERBICIDE, tank mixture combinations with herbicides having different modes of action should be used. To slow the development of resistant biotypes, minimize kochia or Russian thistle forming mature seed.

TANK MIXES

OUST EXTRA herbicide HERBICIDE can be tank mixed with other products that are registered for use on hybrid poplars and where the labeled method of application and timing of application are the same as for OUST EXTRA HERBICIDE. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

USE RESTRICTIONS HYBRID POPLAR PLANTATIONS

- Do not apply more than 10 2/3 ounces OUST EXTRA HERBICIDE per acre per year (contains 0.375 pounds sulfometuron-methyl and 0.10 pounds metsulfuron-methyl).
- Do not apply more than 5 2/3 ounces OUST EXTRA HERBICIDE per acre per single application to an Agricultural site (contains 0.199 pounds sulfometuron-methyl and 0.053 pounds of metsulfuron-methyl).
- Do not apply more than two applications per year for all uses with a minimum of 30 days between applications.

USE PRECAUTIONS HYBRID POPLAR PLANTATIONS

- Apply only to trees which have been established for a minimum of 1 year. Apply when the trees are dormant and avoid contact of the spray with green buds or tissue as injury to the trees may result. Avoid applications during the period when the hybrid poplar are actively growing; from bud-swell in the spring to leaf drop in the fall. Limit the first use to a small area to determine the selectivity of OUST EXTRA HERBICIDE on specific clones. OUST EXTRA HERBICIDE must be activated by rainfall or overhead irrigation before weeds become well established. Use of OUST EXTRA HERBICIDE may cause temporary chlorosis (yellowing)

or a small reduction in tree height during the year of use.

- Applications of OUST EXTRA HERBICIDE made to hybrid poplar trees that are suffering from loss of vigor caused by insects, diseases, drought, winter damage, animal damage, excessive soil moisture, planting shock, previous agricultural practices, or other stresses, may injure or kill the trees.
- Applications of OUST EXTRA HERBICIDE made for release (trees present) must only be made after adequate rainfall has closed the planting slit and settled the soil around the roots following transplanting.
- If a surfactant is used with OUST EXTRA HERBICIDE, allowing the spray to contact tree foliage may injure or kill trees. The user assumes all responsibility for tree injury if a surfactant is used with OUST EXTRA HERBICIDE treatments applied after planting to the extent consistent with applicable law.
- OUST EXTRA HERBICIDE applications may result in damage and mortality to other species of trees when they are present on sites.

NON-AGRICULTURAL USES

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Use on non-crop sites, including industrial turfgrasses, are not within the scope of the Worker Protection Standard.

Do not enter or allow worker entry into treated areas until sprays have dried.

NON-AGRICULTURAL SITES

APPLICATION INFORMATION

OUST EXTRA HERBICIDE is labeled for general weed control on private, public and military lands as follows: Uncultivated non-agricultural areas (including airports, highway, railroad and utility rights-of-way (ROW), sewage disposal areas); uncultivated agricultural areas—noncrop producing (including farmyards, fuel storage areas, fence rows, barrier strips); industrial sites--outdoor (including lumberyards, pipeline and tank farms).

OUST EXTRA HERBICIDE is not labeled for use on recreation areas, sod farms, or for direct application to paved areas (surfaces).

Apply OUST EXTRA HERBICIDE as a preemergence or early postemergence spray before or during the rainy season when weeds

are actively germinating or growing.

Apply by ground or helicopter.

Combination with other herbicides broadens the spectrum of weeds controlled. In addition, total vegetation control can be achieved with higher rates of OUST EXTRA HERBICIDE plus residual-type companion herbicides. To improve the control of weeds, add surfactant at the rate of 0.25% by volume or at the rate specified on the manufacturer's label.

Apply OUST EXTRA HERBICIDE at the rates indicated by weed type. When applied at lower rates, OUST EXTRA HERBICIDE provides short term control of weeds listed; when applied at higher rates, weed control is extended.

WEEDS CONTROLLED

OUST EXTRA HERBICIDE effectively controls the following broadleaf weeds and grasses when applied at the rates shown in non-crop sites:

OUST EXTRA HERBICIDE — 2 2/3 TO 3 OUNCES PER ACRE

Annual bluegrass	Bur clover	Common vetch	Foxtail barley
Annual sowthistle	Carolina geranium	Common yarrow	Foxtail fescue
Aster	Chicory	Conical catchfly	Goldenrod
Bahiagrass	Clover	Corn cockle	Green foxtail
Barnyard grass	Cocklebur	Cow cockle	Hairy vetch
Beckchervil (bur, woodland)	Common chickweed	Crown vetch	Hop clover
Bearded sprangletop	Common groundsel	Dandelion	Houndstongue
Beebalm	Common mallow	Downy brome (cheat)	Italian ryegrass
Bitter sneezeweed	Common mullein	False chamomile	Japanese stiltgrass
Black mustard	Common pokeweed	Fescue	Johnsongrass
Blackeyed-susan	Common purslane	Fiddleneck tarweed	Jointed goatgrass
Blue mustard	Common ragweed	Field pennycress	Lambsquarters
Bouncingbet	Common speedwell	Flixweed	Little barley
Bur buttercup	Common tansy	Florida pusley	Marestail/horseweed*

Maximillion sunflower	Redroot pigweed	Smallseed falseflax	Whitestem filaree
Medusahead	Redstem filaree	Smooth pigweed	Wild barley
Miners lettuce	Reed Canarygrass	Snowberry, western	Wild carrot
Mouseear chickweed	Ripgut brome	Spreading orach	Wild garlic
Oxeye daisy	Rough fleabane	Sweet clover	Wild lettuce
Pennsylvania smartweed	Rye	Tansy ragwort	Wild mustard
Pepperweed	Salsify	Tansymustard	Wild oat
Plains coreopsis	Sandbur (southern, field)	Treacle mustard	Wood sorrel
Plantain	Seashore saltgrass	Tumble mustard	Wooly croton
Poison hemlock	Seaside heliotrope	Tumble pigweed	Yankeweед
Prickly coontail	Shepherd's purse	Western ragweed	Yellow foxtail
Red brome	Signalgrass	Wheat	
Red fescue	Silky crazyweed	Whitetop	

* Certain biotypes of maretail/horseweed are less sensitive to OUST EXTRA HERBICIDE and may be controlled by tank mixes with herbicides with a different mode of action.

OUST EXTRA HERBICIDE — 3 TO 4 OUNCES PER ACRE

Black henbane	Dewberry	Musk thistle	Snowberry
Blackberry	Dogfennel	Panicums (annual)	St. Johnswort
Broom snakeweed	Fireweed	Plumeless thistle	Teasel
Buckhorn plantain	Gorse	Poorjoe	White snakeroot
Bull thistle	Gumweed	Prostrate knotweed	Whitetop, hairy
Common crupina	Halogeton	Rosering gaillardia	Wild caraway
Common sunflower	Henbit	Scotch thistle	Dyer's woad
Crabgrass	Honeysuckle	Seaside arrowgrass	
Curly dock	Multiflora rose (wild roses)	Sericea lespedeza	

OUST EXTRA HERBICIDE — 4 TO 5 1/3* OUNCES PER ACRE

Crimson clover	Giant ragweed	Perennial pepperweed	Yellow nutsedge
Dogfennel	Little mallow	Purple starthistle	Yellow rocket
Giant foxtail	Palmer pigweed	Rush	

* 5 1/3 ounces of OUST EXTRA HERBICIDE contains 0.187 pounds of the active ingredient sulfometuron-methyl and 0.050 pounds of the active ingredient metsulfuron-methyl

NOTE: Use the higher level of the labeled rate ranges under the following conditions:

- heavy weed growth
- soils containing more than 2 1/2% organic matter
- high soil moisture areas, such as along road edges or railroad shoulders

SPECIFIC WEED PROBLEMS

KOCHIA, RUSSIAN THISTLE, AND PRICKLY LETTUCE

Since biotypes of kochia, maretail, Russian thistle, and prickly lettuce are known to be resistant to OUST EXTRA HERBICIDE, tank mixture combinations with herbicides having different modes of action, such as HYVAR® X HERBICIDE or KROVAR® I DF HERBICIDE, must be used. In areas where resistance is known to exist, these weeds must be treated postemergence with other herbicides registered for their control, such as 2,4- D or dicamba. Do not allow kochia, Russian thistle, or prickly lettuce to form mature seed.

KUDZU

OUST EXTRA HERBICIDE applied at 8 ounces (0.281 pounds of the active ingredient sulfometuron-methyl and 0.075 pounds of the active ingredient metsulfuron-methyl) per acre may be used as part of a kudzu abatement program. Retreatment of any re-sprouting kudzu crowns following the initial treatment is necessary to fully control kudzu. Make applications to kudzu after leaves are fully mature and the plant has begun to bloom. Applications may continue until first frost. Apply OUST EXTRA HERBICIDE as a broadcast treatment for the initial application. Use spot-spray or broadcast follow-up applications as needed for thorough coverage. Thoroughly treat foliage and stems (spray-to-wet) without excess runoff. For handgun applications use a minimum of 100 gallons per acre. Boom or boom-less sprayer applications made by ground or air (helicopter only) equipment must use a minimum of 30 gallons per acre per application pass. Double pass applications from different directions can improve spray

coverage. Use a non-ionic surfactant (minimum 70% active ingredient) or crop oil concentrate at the rate of 1 quart per 100 gallons of spray solution (0.25% v/v).

TANK MIX COMBINATIONS

To improve preemergence to early postemergence control of weeds and grasses, add 2 2/3 to 5 1/3 ounces of OUST EXTRA HERBICIDE per acre to the labeled rates of the following herbicides: HYVAR® X HERBICIDE, KROVAR® I DF HERBICIDE, VELPAR L VU HERBICIDE, VELPAR DF VU HERBICIDE, TELAR® HERBICIDE, diuron, glyphosate, dicamba, or 2,4-D.

Apply OUST EXTRA HERBICIDE plus a companion herbicide at the rates and timing as shown on package labels for target weeds. For application method and other use specifications, use the most restrictive directions for the intended combination. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Do not tank mix OUST EXTRA HERBICIDE with HYVAR X-L HERBICIDE.

INDUSTRIAL TURFGRASS

APPLICATION INFORMATION

OUST EXTRA HERBICIDE may be used to control weeds on industrial turfgrass, on roadsides, or on other non-crop sites where the turfgrass is well established as a ground cover. Applications may temporarily suppress grass growth and inhibit seedhead formation (chemical mowing).

BERMUDAGRASS RELEASE

APPLICATION TIMING

Apply OUST EXTRA HERBICIDE at 1/2 to 2 ounces per acre after bermudagrass has broken dormancy and is well established, usually 30 days after initial spring flush. If additional applications are necessary, apply OUST EXTRA HERBICIDE again during late spring to early summer. On established weeds, apply OUST EXTRA HERBICIDE 1 to 2 weeks after mowing for the best results.

OUST EXTRA HERBICIDE may also be applied in late fall or early winter. Use the lower rates on small seedling weeds and a higher rate on larger weeds.

TANK MIX COMBINATIONS—BERMUDAGRASS (SOUTH ONLY)

Apply 1 to 2 ounces OUST EXTRA HERBICIDE per acre as a tank mix with 3 to 4 pounds active ingredient of MSMA per acre on

well established bermudagrass during the summer. Refer to the MSMA package label for a list of additional weeds that may be controlled. Two or more sequential applications of MSMA alone may be necessary to maintain weed control. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

CENTIPEDEGRASS RELEASE

APPLICATION TIMING

Apply 1/2 to 2 ounces per acre of OUST EXTRA HERBICIDE in the fall or early winter, or in the early summer following green-up of the centipede. Refer to the listing of Weeds Controlled in this section for use rates and species controlled by OUST EXTRA HERBICIDE.

SMOOTH BROME AND CRESTED WHEATGRASS RELEASE AND SUPPRESSION

APPLICATION TIMING

Apply 1/2 to 1 1/2 ounce per acre of OUST EXTRA HERBICIDE per acre to turfgrass after green-up and before seedheads emerge (boot stage). Ensure that desirable grasses are well-established at application, as premature treatment may result in top kill and stand reduction of desirable turfgrass. Make only one application per year.

WEEDS CONTROLLED

OUST EXTRA HERBICIDE may be used to control the following weeds in industrial turfgrass when applied at the use rates shown.

OUST EXTRA HERBICIDE — 1/2 TO 1 OUNCE PER ACRE

Asters (except heath aster)	Common sunflower	Field pennycress	Redroot pigweed
Buttercups	Common vetch	Fleabanes	Sweetclover
Common broomweed	Common yarrow	Goldenrod	Tansymustard
Common chickory	Curly dock	Little barley	White clover
Common chickweed	False chamomile	Mouseear chickweed	Wild garlic

OUST EXTRA HERBICIDE — 1 TO 2 OUNCES PER ACRE

Bitter sneezeweed	Common ragweed	Hopclover	Redstem filaree
Buckhorn plantain	Crimson clover	Japanese stiltgrass	Tumble mustard
Carolina geranium	Eveningprimrose	Jointed goatgrass	Wild carrot
Cheat (Downy brome)	Foxtail barley	Medusahead	Wild oats
Common dandelion	Giant ragweed	Musk thistle	Wild parsnip
Common mullein	Hairy vetch	Prairie coneflower	

USE RESTRICTIONS INDUSTRIAL TURFGRASS

- Do not apply more than 10 2/3 ounces OUST EXTRA HERBICIDE per acre per year (contains 0.375 pounds sulfometuron-methyl and 0.10 pounds metsulfuron-methyl.)
- Do not apply more than 8 ounces OUST EXTRA HERBICIDE per acre per year (contains 0.281 pounds sulfometuron-methyl and 0.075 pounds metsulfuron-methyl.)
- Do not apply more than two applications per year for all uses with a minimum of 30 days between applications.

USE PRECAUTIONS INDUSTRIAL TURFGRASS

- Excessive injury to turfgrass may result if a surfactant is used with OUST EXTRA HERBICIDE applications made to actively growing turfgrass. The user assumes all responsibility for turfgrass injury if a surfactant is used with OUST EXTRA HERBICIDE treatments applied to actively growing turfgrass to the extent consistent with applicable law.
- OUST EXTRA HERBICIDE may temporarily discolor or cause top kill of turfgrass. Applications made while turfgrass is dormant may delay green-up in the spring.
- Annual retreatments may reduce vigor, particularly at the higher labeled rates, where bahiagrass, crested wheatgrass and smooth brome are grown.
- OUST EXTRA HERBICIDE application on turfgrass that is under stress from drought, insects, disease, cold temperatures or late spring frost, may result in injury.

GRASS REPLANT INTERVALS

Following a treatment with OUST EXTRA HERBICIDE at use rates up to 2 ounces per acre the following grasses may be replanted:

Alta fescue
Meadow foxtail

Orchardgrass
Smooth brome

Sheep fescue
Western wheatgrass

The replant intervals are for soils with a pH of less than 7.5.

Soils having a pH greater than 7.5 will require longer intervals. The replant intervals are for applications made in the spring. Because OUST EXTRA HERBICIDE degradation is slowed by cold or frozen soils, applications made in the fall must consider the intervals as beginning in the spring following treatment.

Testing has indicated that there is considerable variation in response among species of grasses when seeded into areas treated with OUST EXTRA HERBICIDE. If species other than listed above are to be planted into areas treated with OUST EXTRA HERBICIDE a field bioassay must be performed, or previous experience may be used to determine the feasibility of replanting treated areas.

ADDITIONAL RESTRICTIONS AGRICULTURAL AND NON- AGRICULTURAL USES

- Do not treat frozen or snow covered soil.
- Do not use on lawns, walks, driveways, tennis courts, or similar areas.
- Do not apply in or on irrigation ditches or canals including their outer banks.
- Do not apply through any type of irrigation system.
- Do not use this product in the following counties of Colorado: Saguache, Rio Grande, Alamosa, Costilla and Conejos.
- Do not use this product in California.
- Do not apply more than 10 2/3 ounces OUST EXTRA HERBICIDE per acre per year (contains 0.375 pounds of sulfometuron-methyl and 0.10 pounds of metsulfuron-methyl).
- Do not apply more than 5 2/3 ounces OUST EXTRA HERBICIDE per acre per single application to an Agricultural site (contains 0.199 pounds of sulfometuron-methyl and 0.053 pounds of metsulfuron-methyl).
- Do not apply more than 8 ounces OUST EXTRA HERBICIDE per acre per single application to a Non-Agricultural site (contains 0.281 pounds of sulfometuron-methyl and 0.075 pounds of metsulfuron-methyl).
- Do not apply more than two applications per year for all uses with a minimum of 30 days between applications.
- Do not use on food or feed crops.
- Do not use on sod farms.

ADDITIONAL INSTRUCTIONS, PRECAUTIONS AGRICULTURAL AND NON- AGRICULTURAL USES

- Injury to or loss of desirable species may result if equipment is drained or flushed on or near desirable trees or other plants, or on areas where their roots may extend, or in locations where the chemical may be washed or moved into contact with their roots.
- Treatment of powdery, dry soil or light, sandy soil when there is little likelihood of rainfall soon after treatment may result in off target movement and possible damage to susceptible crops when soil particles are moved by wind or water. Injury to crops may result if treated soil is washed, blown, or moved onto land used to produce crops. Exposure to OUST EXTRA HERBICIDE may injure or kill most crops. Injury may be more severe when the crops are irrigated. Do not apply OUST EXTRA HERBICIDE when these conditions are identified and powdery, dry soil or light or sandy soil are known to be prevalent in the area to be treated.
- Applications made where runoff water flows onto agricultural land may injure crops. Applications made during periods of intense rainfall, to soils saturated with water, surfaces paved with materials such as asphalt or concrete, or soils through which rainfall will not readily penetrate may result in runoff and movement of OUST EXTRA HERBICIDE.
- Leave treated soil undisturbed to reduce the potential for OUST EXTRA HERBICIDE movement by soil erosion due to wind or water.
- Keep from contact with fertilizers, insecticides, fungicides, and seeds.
- Low rates of OUST EXTRA HERBICIDE can kill or severely injure most crops. Following an OUST EXTRA HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which OUST EXTRA HERBICIDE is not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.
- If non-crop sites treated with OUST EXTRA HERBICIDE are to be converted to a food, feed, or fiber agricultural crop, or to a horticultural crop, do not plant the treated sites for at least one year after the OUST EXTRA HERBICIDE application. A field bioassay must then be completed before planting to crops.

FIELD BIOASSAY

To conduct a field bioassay, grow to maturity test strips of the crop(s) you plan to grow the following year. The test strips must

cross the entire field including knolls and low areas. Crop response to the bioassay will indicate whether or not to plant the crops(s) grown in the test strips. In the case of suspected off-site movement of OUST EXTRA HERBICIDE to cropland, soil samples may be quantitatively analyzed for OUST EXTRA HERBICIDE or any other herbicide which could be having an adverse effect on the crop, in addition to conducting the above-described bioassay.

TANK MIX COMBINATIONS

OUST EXTRA HERBICIDE may be tank mixed with other herbicides and/or adjuvants registered for use in conifer plantations, noncrop sites, and industrial turfgrass.

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

SPRAY EQUIPMENT

Low rates of OUST EXTRA HERBICIDE can kill or severely injure most crops. Following a OUST EXTRA HERBICIDE application, the use of spray equipment to apply other pesticides to crops on which OUST EXTRA HERBICIDE or its active ingredients are not registered may result in their damage. The most effective way to reduce this crop damage potential is to use dedicated mixing and application equipment.

APPLICATION

GROUND

Use a sufficient volume of water to ensure thorough coverage when applying OUST EXTRA HERBICIDE as a broadcast or directed spray. Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern. Be sure the sprayer is calibrated before use. Avoid overlapping and shut off spray booms while starting, turning, slowing, or stopping to avoid injury to desired species.

AIR

Select a spray volume and delivery system that will ensure thorough coverage and a uniform spray pattern. Be sure the sprayer is calibrated. Avoid overlapping and shut off spray booms while starting, turning or slowing to avoid injury to desired species

MIXING INSTRUCTIONS

1. Fill spray tank 1/2 full of water.

2. With the agitator running, add the proper amount of OUST EXTRA HERBICIDE.
3. If using a companion product, add the labeled amount.
4. For postemergent applications, add the proper amount of spray adjuvants.
5. Add the remaining water.
6. Agitate the spray tank thoroughly.

OUST EXTRA HERBICIDE spray preparations are stable if they are pH neutral or alkaline and stored at or below 100° F.

SPRAYER CLEANUP

Thoroughly clean all mixing and spray equipment following applications of OUST EXTRA HERBICIDE as follows:

1. Drain tank; thoroughly rinse spray tanks, boom, and hoses with clean water.
2. Fill the tank with clean water and 1 gal of household ammonia (contains 3% active) for every 100 gal of water. Flush the hoses, boom, and nozzles with the cleaning solution. Then add more water to completely fill the tank. Circulate the cleaning solution through the tank and hoses for at least 15 min. Flush the hoses, boom, and nozzles again with the cleaning solution, and then drain the tank.

Equivalent amounts of an alternate-strength ammonia solution or a commercial cleaner can be used in the cleanout procedure.

If a commercial cleaner is used, carefully read and follow the individual cleaner instructions.

3. Remove the nozzles and screens and clean separately in a bucket containing cleaning agent and water.
4. Repeat step 2.
5. Rinse the tank, boom, and hoses with clean water.
6. Dispose of the rinsate on a labeled site or at an approved waste disposal facility. If a commercial cleaner is used follow the directions for rinsate disposal on the label.

Notes:

1. Do not use chlorine bleach in combination with ammonia when cleaning spray equipment. Do not clean spray equipment in an enclosed area.
2. Steam-cleaning aerial spray tanks is advised before performing the above cleanout procedure to facilitate the removal of any caked deposits.
3. When OUST EXTRA HERBICIDE is tank mixed with other pesticides, all required cleanout procedures must be examined and

the most rigorous procedure followed.

AIR ASSISTED (AIR BLAST) FIELD CROP SPRAYERS

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, that it is configured properly, and that drift potential has been minimized.

Note: Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Read the specific crop use and application equipment instructions to determine if an air assisted field crop sprayer can be used.

DRIFT CONTROL ADDITIVES

Using product compatible drift control additives can reduce drift potential. When a drift control additive is used, read and carefully observe cautionary statements and all other information on the additive's label. If using an additive that increases viscosity, ensure that the nozzles and other application equipment will function properly with a viscous spray solution. Preferred drift control additives have been certified by the Chemical Producers and Distributors Association (CPDA).

UPWIND SWATH DISPLACEMENT

When applications are made with a crosswind the swath will be displaced downwind. An adjustment for swath displacement is made on the downwind edge of the application site by shifting the path of the application equipment upwind. Applicators must use $\frac{1}{2}$ swath displacement upwind at the downwind edge of the field.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal.

Pesticide Storage: Store product in original container only. Store in a cool, dry place.

Pesticide Disposal: Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

STORAGE AND DISPOSAL *(continued)*

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers (Capacity Greater Than 50 Pounds): Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Plastic and Metal Containers, e.g., Intermediate Bulk Containers [IBC] (Size or Shape Too Large to be Tipped, Rolled or Turned Upside Down): Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying the contents from this container into application equipment or mix tank and before final disposal using the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain,

STORAGE AND DISPOSAL *(continued)*

pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. For Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Nonrefillable Paper or Plastic Bags, Fiber Sacks including Flexible Intermediate Bulk Containers (FIBC) or Fiber Drums With Liners: Nonrefillable container. Do not reuse or refill this container. Completely empty paper or plastic bag, fiber sack or drum liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer for recycling if available or dispose of empty paper or plastic bag, fiber sack or fiber drum and liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

Refillable Fiber Drums With Liners: Refillable container (fiber drum only). Refilling Fiber Drum: Refill this fiber drum with OUST EXTRA HERBICIDE containing sulfometuron-methyl and metsulfuron-methyl, only. Do not reuse this fiber drum for any other purpose. Cleaning before refilling is the responsibility of the refiller. Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment.

Disposing of Fiber Drum and/or Liner: Do not reuse this fiber drum for any other purpose other than refilling (see preceding). Cleaning the container (liner and/or fiber drum) before final disposal is the responsibility of the person disposing of the container. Offer the liner for recycling if available or dispose of liner in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. If drum is contaminated and cannot be reused, dispose of it in the manner required for its liner. To clean the fiber drum before final disposal, completely empty the fiber drum by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application or manufacturing equipment. Then offer the fiber drum for recycling if available or dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances.

All Other Refillable Containers: **Refillable container. Refilling Container:** Refill this container with OUST EXTRA HERBICIDE containing sulfometuron-methyl and metsulfuron-methyl, only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and

STORAGE AND DISPOSAL *(continued)*

closure devices. If damage is found, do not use the container, contact BAYER CROPSCIENCE LP at the number below for instructions. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container, contact BAYER CROPSCIENCE LP at the number below for instructions. Disposing of Container: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Outer Foil Pouches of Water Soluble Packets (WSP): Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or, dispose of the empty outer foil pouch in the trash as long as WSP is unbroken. If the outer pouch contacts the formulated product in any way, the pouch must be triple rinsed with clean water. Add the rinsate to the spray tank and dispose of the outer pouch as described previously.

Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, or in the event of a major spill, fire or other emergency, contact BAYER CROPSCIENCE LP at 1-800-334-7577, day or night.

Bayer (reg'd), the Bayer Cross (reg'd), Krovar®, Oust® and Telar® are registered trademarks of Bayer.

Hyvar® and Krovar® are registered trademarks of AMVAC Chemical Corporation.

Velpar® is a registered trademark of Tessenderlo Kerley, Inc. used under license by Bayer.

CONDITIONS OF SALE AND LIMITATIONS OF WARRANTY AND LIABILITY

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Ineffectiveness, plant injury, other property damage, as well as other unintended consequences may result because of factors beyond the control of Bayer CropScience LP. Those factors include, but are not limited to, weather conditions, presence of other materials or the manner of use or application. All such risks shall be assumed by the user or buyer to the extent consistent with applicable law.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCEIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience LP is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCEIENCE LP DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCEIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Produced for:

Bayer Environmental Science
A Division of Bayer CropScience LP
5000 CentreGreen Way, Suite 400
Cary, NC 27513

For product information call: 1-800-331-2867

PULL HERE TO OPEN ▲



Oust[®] EXTRA HERBICIDE

GROUP 2 HERBICIDE

Dispersible Granules

Active Ingredient	By Weight
Sulfometuron-methyl {Methyl 2-[[[[4,6-dimethyl-2-pyrimidinyl)amino]-carbonyl]amino]sulfonyl]benzoate}	56.25%
Metsulfuron-methyl Methyl 2-[[[[4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino]-carbonyl]amino]sulfonyl]benzoate	15.00%
Other Ingredients	28.75%
Total	100%

EPA Reg. No. 432-1557

Nonrefillable Container
Net Weight

4 Pounds

85787128

85805304E 180308AV3

KEEP OUT OF REACH OF CHILDREN **CAUTION**

See Back Panel for First Aid Instructions
and Booklet for Complete Precautionary
Statements and Directions for Use.

Si usted no entiende la etiqueta, busque
a alguien para que se la explique a
usted en detalle. (If you do not
understand this label, find someone to
explain it to you in detail.)

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

1/10
Revision Date: 08/07/2018
Print Date: 08/07/2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name OUST® EXTRA HERBICIDE

Product code (UVP) 85423010

SDS Number 102000033583

EPA Registration No. 432-1557

Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
USA

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation: Category 2B

Labelling in accordance with regulation HCS 29CFR §1910.1200

Signal word: Warning

Hazard statements

Causes eye irritation.

Precautionary statements

Wash thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.

No health hazards not otherwise classified.

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

2/10

Revision Date: 08/07/2018
Print Date: 08/07/2018

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
SULFOMETURON METHYL	74222-97-2	56.25
Metsulfuron-methyl	74223-64-6	15.0
Trisodium orthophosphate	7601-54-9	1.76
Sulfonated aromatic polymer, sodium salt	68425-94-5	4.5

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	To date no symptoms are known.
-----------------	--------------------------------

Indication of any immediate medical attention and special treatment needed

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.
------------------	---

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Water spray, Foam, Dry chemical, Carbon dioxide (CO ₂)
-----------------	--

Unsuitable	High volume water jet
-------------------	-----------------------

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

3/10

Revision Date: 08/07/2018
Print Date: 08/07/2018

Advice for firefighters

Special protective equipment for firefighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Flash point	Not applicable
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Explosivity	Not explosive
Dust explosion class	No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
--------------------	--

Methods and materials for containment and cleaning up

Methods for cleaning up	Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.
Additional advice	Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.
Reference to other sections	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Avoid dust formation. Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.
Hygiene measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

4/10

Revision Date: 08/07/2018
Print Date: 08/07/2018

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
SULFOMETURON METHYL	74222-97-2	5 mg/m ³ (TWA)	02 2012	ACGIH
SULFOMETURON METHYL	74222-97-2	3.5 mg/m ³ (TWA PEL)	08 2010	US CA OEL
Trisodium orthophosphate	7601-54-9	5 mg/m ³ (STEL)	2012	WEEL

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection

Chemical resistant nitrile rubber gloves

Eye protection

Safety glasses with side-shields

Skin and body protection

Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.

Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	light beige
Physical State	small rod
Odor	slight

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

5/10

Revision Date: 08/07/2018
Print Date: 08/07/2018

Odour Threshold	No data available
pH	>= 5.5 at 1 % (23 °C) (deionized water)
Vapor Pressure	No data available
Vapor Density (Air = 1)	No data available
Bulk density	0.50 - 0.70 g/ml (loose)
Evaporation rate	Not applicable
Boiling Point	Not applicable
Melting / Freezing Point	Not applicable
Water solubility	dispersible
Minimum Ignition Energy	Not applicable
Decomposition temperature	No data available
Partition coefficient: n-octanol/water	Not applicable
Flash point	Not applicable
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Explosivity	Not explosive
Dust explosion class	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

6/10
Revision Date: 08/07/2018
Print Date: 08/07/2018

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Skin Absorption, Eye contact, Inhalation, Ingestion

Immediate Effects

Eye Moderate eye irritation.

Skin Harmful if absorbed through skin.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 5,000 mg/kg

Acute inhalation toxicity LC50 (Rat) 5.3 mg/l
Exposure time: 4 h

Acute dermal toxicity LD50 (Rabbit) > 2,000 mg/kg

Skin corrosion/irritation slight irritation (Rabbit)

Serious eye damage/eye irritation slight irritation (Rabbit)

Respiratory or skin sensitisation Non-sensitizing. (Guinea pig)

Assessment STOT Specific target organ toxicity – repeated exposure

Metsulfuron-methyl: Based on available data, the classification criteria are not met.

Assessment mutagenicity

Metsulfuron-methyl: Based on available data, the classification criteria are not met. Not mutagenic in Ames Test.

Assessment carcinogenicity

Metsulfuron-methyl is not considered carcinogenic.

ACGIH

SULFOMETURON METHYL 74222-97-2 Group A4

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Metsulfuron-methyl did not cause reproductive toxicity in laboratory animals.

Assessment developmental toxicity

Metsulfuron-methyl is not considered a developmental toxicant.

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

7/10

Revision Date: 08/07/2018
Print Date: 08/07/2018

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) > 148 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient sulfometuron methyl.
	LC50 (Oncorhynchus mykiss (rainbow trout)) > 150 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient metsulfuron methyl.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) > 150 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient sulfometuron methyl.
	EC50 (Daphnia magna (Water flea)) > 120 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient metsulfuron methyl.
Toxicity to aquatic plants	EC50 (Anabaena flos-aquae (cyanobacterium)) 0.066 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient metsulfuron methyl.
Biodegradability	Metsulfuron-methyl: No data available
Koc	Metsulfuron-methyl: No data available
Bioaccumulation	Metsulfuron-methyl: No data available
Mobility in soil	Metsulfuron-methyl: No data available
Environmental precautions	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal
----------------	--

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

8/10

Revision Date: 08/07/2018
Print Date: 08/07/2018

regulations.

Follow container label instructions for disposal of wastes generated during use in compliance with the product label.

Contaminated packaging

Consult state and local regulations regarding the proper disposal of container.

Follow advice on product label and/or leaflet.

RCRA Information

Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR

Not dangerous goods / not hazardous material

IMDG

UN number	3077
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SULFOMETURON METHYL, METSULFURON METHYL MIXTURE)

IATA

UN number	3077
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (SULFOMETURON METHYL, METSULFURON METHYL MIXTURE)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1557

US Federal Regulations

TSCA list

Trisodium orthophosphate	7601-54-9
Sulfonated aromatic polymer, sodium salt	68425-94-5
Sucrose	57-50-1

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

9/10
Revision Date: 08/07/2018
Print Date: 08/07/2018

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

Not applicable.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

Trisodium orthophosphate	7601-54-9	CA, CT, IL, MN, NJ
Polyvinylpyrrolidone	9003-39-8	CA
Sucrose	57-50-1	MN, RI
Polyethylene glycol	25322-68-3	MN

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Harmful if absorbed through skin.
Moderate eye irritation.
Avoid contact with skin, eyes and clothing.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
ATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development

SAFETY DATA SHEET



OUST® EXTRA HERBICIDE

Version 1.0 / USA
102000033583

10/10
Revision Date: 08/07/2018
Print Date: 08/07/2018

TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: New Safety Data Sheet due to change in numbering scheme.

Revision Date: 08/07/2018

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

1/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE
Product code (UVP) 86738473
SDS Number 102000037603
EPA Registration No. 524-343

Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide
Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
A division of Bayer CropScience LP
5000 Centregreen Way, Suite 400
Cary, NC 27513
USA
Responsible Department Email: SDSINFO.BCS-NA@bayer.com
Emergency telephone no.
Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577
Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

2/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

Hazardous Component Name	CAS-No.	Concentration % by weight
Isopropylamine salt of glyphosate	38641-94-0	53.8

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	To date no symptoms are known.
-----------------	--------------------------------

Indication of any immediate medical attention and special treatment needed

Risks	This product is not a cholinesterase inhibitor.
Treatment	Treatment with atropine and oximes is not indicated. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High volume water jet

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

3/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

Special hazards arising from the substance or mixture	In the event of fire the following may be released: Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Oxides of phosphorus
Advice for firefighters	
Special protective equipment for firefighters	In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. Equipment should be thoroughly decontaminated after use.
Further information	Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
Flash point	does not flash
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Explosivity	Not explosive

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Use personal protective equipment. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

4/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

Advice on safe handling Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing. Keep working clothes separately. Garments that cannot be cleaned must be destroyed (burnt).

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container. Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in a place accessible by authorized persons only. Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode. Protect from freezing. Partial crystallization may occur on prolonged storage below the minimum storage temperature. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

No known occupational limit values.

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating,

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

5/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

drinking, smoking or using the toilet.

Eye protection

Use tightly sealed goggles and face protection.

Skin and body protection

Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.

Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form	Liquid, clear
Colour	colorless to light yellow or brown
Odour	odourless
Odour Threshold	No data available
pH	4.4 - 4.8 (6.3 %)
Melting point/range	No data available
Boiling Point	No data available
Flash point	does not flash
Flammability	No data available
Auto-ignition temperature	No data available
Minimum ignition energy	Not applicable
Self-accelerating decomposition temperature (SADT)	No data available
Upper explosion limit	Not applicable
Lower explosion limit	Not applicable
Vapour pressure	Not applicable
Evaporation rate	No data available
Relative vapour density	No significant volatility.
Relative density	1.206 (20 °C)
Density	1.21 g/cm³ (20 °C)
Water solubility	completely soluble
Partition coefficient: n-	Glyphosate: log Pow: -3.2

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

6/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

octanol/water

Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	Not explosive
Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Galvanised steel, Unlined mild steel
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Skin contact, Eye contact, Inhalation
Immediate Effects	
Eye	Not expected to produce significant adverse effects when recommended use instructions are followed.
Skin	Not expected to produce significant adverse effects when recommended use instructions are followed.
Ingestion	Not expected to produce significant adverse effects when recommended use instructions are followed.
Inhalation	Not expected to produce significant adverse effects when recommended use instructions are followed.

Information on toxicological effects

Acute oral toxicity	LD50 (Rat) > 5,000 mg/kg Test conducted with a similar formulation. No deaths
----------------------------	---

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

7/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

Acute inhalation toxicity	LC50 (Rat) > 4.24 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. Highest attainable concentration. No deaths Test conducted with a similar formulation.
Acute dermal toxicity	LD50 (Rabbit) > 5,000 mg/kg Test conducted with a similar formulation. No deaths
Skin corrosion/irritation	No skin irritation (Rabbit) Test conducted with a similar formulation.
Serious eye damage/eye irritation	No eye irritation (Rabbit) Test conducted with a similar formulation.
Respiratory or skin sensitisation	Skin: Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test Test conducted with a similar formulation.

Assessment STOT Specific target organ toxicity – single exposure

Glyphosate: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Glyphosate did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Glyphosate was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Glyphosate was not carcinogenic in lifetime feeding studies in rats and mice.

Important comment to IARC Listing:, Our expert opinion is that classification as a carcinogen is not warranted.

ACGIH

None.

NTP

None.

IARC

Isopropylamine salt of glyphosate

38641-94-0

Overall evaluation: 2A

OSHA

None.

Assessment toxicity to reproduction

Glyphosate did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

8/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

Glyphosate did not cause developmental toxicity in rats and rabbits.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) > 1,000 mg/l static test; Exposure time: 96 h Test conducted with a similar formulation.
	LC50 (Lepomis macrochirus (Bluegill sunfish)) > 1,000 mg/l static test; Exposure time: 96 h Test conducted with a similar formulation.
Chronic toxicity to fish	Oncorhynchus mykiss (rainbow trout) flow-through test NOEC: >= 9.63 mg/l The value mentioned relates to the active ingredient glyphosate.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 930 mg/l static test; Exposure time: 48 h Test conducted with a similar formulation.
Chronic toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)): 12.5 mg/l Exposure time: 21 d The value mentioned relates to the active ingredient glyphosate.
Toxicity to aquatic plants	EbC50 (Raphidocelis subcapitata (freshwater green alga)) 72.9 mg/l static test; Exposure time: 72 h The value mentioned relates to the active ingredient glyphosate. NOEC (Raphidocelis subcapitata (freshwater green alga)) 26.4 mg/l static test; Exposure time: 72 h The value mentioned relates to the active ingredient glyphosate.
Biodegradability	Glyphosate: Not rapidly biodegradable
Koc	Glyphosate: Koc: 6920
Bioaccumulation	Glyphosate: Does not bioaccumulate.
Mobility in soil	Glyphosate: Immobile in soil
Results of PBT and vPvB assessment	
PBT and vPvB assessment	Glyphosate: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Additional ecological	No further ecological information is available.

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

9/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

information

- Environmental precautions** Apply this product as specified on the label.
Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
Retain and dispose of contaminated wash water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

- Product** It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines.
Do not contaminate water, food, or feed by disposal.
Follow all local/regional/national/international regulations.

- Contaminated packaging** Follow advice on product label and/or leaflet.
Do not re-use empty containers.
Triple rinse containers.
Puncture container to avoid re-use.
Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities.
If burned, stay out of smoke.

- RCRA Information** Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 524-343

US Federal Regulations

TSCA list

Water 7732-18-5

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

10/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None.

Environmental

CERCLA

None.

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

SAFETY DATA SHEET



ROUNDUP CUSTOM® FOR AQUATIC & TERRESTRIAL USE

Version 1.0 / USA
102000037603

11/11

Revision Date: 09/25/2020
Print Date: 10/02/2020

N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

NFPA 704 (National Fire Protection Association):

Health - 0 Flammability - 1 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 0 Flammability - 1 Physical Hazard - 1 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: New Safety Data Sheet.

Revision Date: 09/25/2020

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.

ATTENTION:

This specimen label is provided for general information only.

- This pesticide product may not yet be available or approved for sale or use in your area.
- It is your responsibility to follow all Federal, state and local laws and regulations regarding the use of pesticides.
- Before using any pesticide, be sure the intended use is approved in your state or locality.
- Your state or locality may require additional precautions and instructions for use of this product that are not included here.
- Monsanto does not guarantee the completeness or accuracy of this specimen label. The information found in this label may differ from the information found on the product label. You must have the EPA approved labeling with you at the time of use and must read and follow all label directions.
- You should not base any use of a similar product on the precautions, instructions for use or other information you find here.
- Always follow the precautions and instructions for use on the label of the pesticide you are using.



Complete Directions for Use

A broad-spectrum postemergence herbicide for aquatic and industrial, turf, ornamental, forestry, roadside, utility rights-of-way, select crop, and other listed terrestrial weed control.

(For a complete list of aquatic and terrestrial use sites, see the Directions for Use section of this label.)

EPA Reg. No. 524-343

2018

GROUP 9 HERBICIDE

Read the entire label before using this product. Use only according to label directions.

AVOID CONTACT OF THIS HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, AS SEVERE PLANT INJURY OR DESTRUCTION COULD RESULT.

THIS IS AN END-USE PRODUCT. MONSANTO COMPANY DOES NOT INTEND AND HAS NOT REGISTERED IT FOR REFORMULATION. SEE INDIVIDUAL CONTAINER LABEL FOR REPACKAGING LIMITATIONS.

Read the "LIMIT OF WARRANTY AND LIABILITY" statement at the end of this labeling before buying or using. If terms are not acceptable, return at once unopened.

Not all products listed on this label are registered for use in California. Check the registration status of each product in California before using.

1.0 INGREDIENTS

ACTIVE INGREDIENT:

*Glyphosate, N-(phosphonomethyl)glycine, in the form of its isopropylamine salt..... 53.8%

OTHER INGREDIENTS: 46.2%
100.0%

*Contains 648 grams of the active ingredient glyphosate, in the form of its isopropylamine salt per liter, or 5.4 pounds per U.S. gallon, which is equivalent to 480 grams of the acid, glyphosate, per liter or 4.0 pounds per U.S. gallon (39.9% by weight).

2.0 IMPORTANT PHONE NUMBERS

1. FOR PRODUCT INFORMATION OR ASSISTANCE USING THIS PRODUCT, CALL TOLL-FREE, (800) 332-3111
2. IN CASE OF AN EMERGENCY INVOLVING THIS PRODUCT, OR FOR MEDICAL ASSISTANCE, CALL COLLECT, DAY OR NIGHT, (314) 694-4000

3.0 PRECAUTIONARY STATEMENTS

3.1 Hazards to Humans and Domestic Animals

Keep out of reach of children

CAUTION

DOMESTIC ANIMALS: This product is considered to be relatively nontoxic to dogs and other domestic animals; however, ingestion of this product or large amounts of freshly sprayed vegetation could result in temporary gastrointestinal irritation (vomiting, diarrhea, colic, etc.). If such symptoms are observed, provide the animal with plenty of fluids to prevent dehydration. Call a veterinarian if symptoms persist for more than 24 hours.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, socks and shoes.

Follow manufacturer's instructions for cleaning/maintaining PPE (Personal Protective Equipment). If there are no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

3.2 Environmental Hazards

Killing aquatic weeds can result in depletion or loss of oxygen in the water due to decomposition of dead plant material. This oxygen loss can cause fish suffocation. Consult with your State agency with primary responsibility for regulating pesticides before applying to public waters to determine if a permit is required. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high-water mark, except if applying aerially over the forest canopy. Do not contaminate water when cleaning equipment or disposing of equipment wash waters and rinsate.

3.3 Physical or Chemical Hazards

Spray solutions of this product may be mixed, stored and applied using stainless steel, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product react with such containers and tanks to produce hydrogen gas, which can form a highly combustible gas mixture. This gas mixture could flash or explode if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source and cause serious personal injury.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in any manner inconsistent with its labeling. This product may only be used in accordance with the Directions for Use on this label or on separately published supplemental labeling. Supplemental labeling for this product can be obtained from your Authorized Monsanto Retailer or Monsanto Company Representative.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, shoes plus socks, and chemical-resistant gloves made of any waterproof material.

Non-Agricultural Use Requirements

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep people and pets off treated areas until spray solution has dried.

4.0 STORAGE AND DISPOSAL

Proper pesticide storage and disposal are essential to protect against exposure to people and the environment due to leaks and spills, excess product or waste, and vandalism. Do not allow this product to contaminate water, foodstuffs, feed or seed by storage and disposal.

PESTICIDE STORAGE: STORE ABOVE 5°F (-15°C) TO KEEP PRODUCT FROM CRYSTALLIZING. Crystals will settle to the bottom. If allowed to crystallize, warm to 68°F (20°C) to redissolve and roll or shake container or recirculate contents of larger containers to mix well before using. Store pesticides away from food, pet food, feed, seed, fertilizers, and veterinary supplies. Keep container closed to prevent spills and contamination. See individual container label for additional storage conditions, if any.

PESTICIDE DISPOSAL: To avoid wastes, use all material in the container, including rinsate, by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program. Such programs are often run by state or local governments or by industry. All disposal must be in accordance with applicable federal, state and local regulations and procedures.

CONTAINER HANDLING AND DISPOSAL: See base label attached to the container for container handling and disposal instructions and refilling limitations.

5.0 PRODUCT INFORMATION

Product Description: This product is a postemergence, systemic herbicide that, when mixed in the spray tank with a surfactant that is approved for aquatic use, may be used for both aquatic and terrestrial weed control. This product provides broad-spectrum control of many annual and perennial weeds, woody brush, trees and vines. This product does not control submerged weeds or provide residual weed control in soil. It is formulated as a water-soluble liquid that, unless otherwise directed, requires dilution with water or another carrier and the addition of a surfactant according to label directions and intended use site before application using standard and specialized pesticide application equipment.

Mechanism of Action: The active ingredient in this product inhibits an enzyme found only in plants and microorganisms that is essential to the formation of specific amino acids.

No Soil Activity: This product binds tightly to soil particles and does not provide residual weed control. Weeds must be emerged at the time of application to be controlled by foliar application of this product. Weed seeds in the soil will not be affected by this product and will continue to germinate. Unattached plant rhizomes and rootstocks beneath the soil surface will also not be affected by this product.

Biological Degradation: Degradation of this product is primarily a biological process carried out by soil microbes.

Stage of Weeds: Aquatic weeds must have foliage above the water surface in order to be controlled by this product. On terrestrial sites, annual and perennial weeds are easiest to control when they are small. See the "WEEDS CONTROLLED" section of this label for more information on the control of specific weeds.

Cultural Considerations: Reduced weed control could result when this product is applied to annual or perennial weeds that have been mowed, grazed or cut, and have not been allowed to re-grow prior to application. Always use the highest application rate of this product within the given range when weed growth is heavy or dense, or when weeds are growing in an undisturbed (non-cultivated) area. Reduced weed control could result when this product is applied to weeds that show signs of disease or insect damage, are covered with dust, or are surviving under poor growing conditions.

Spray Coverage: For enhanced results, spray coverage must be uniform and complete. Do not spray foliage to the point of runoff.

Rainfastness: Rainfall or submersion of aquatic weeds by wave action within 4 hours of application could wash this product off of the foliage and a second application might be needed for acceptable weed control. Refer to specific use sections of this label for additional information on minimum intervals required before re-application of this product.

Time to Symptoms: This product moves through the plant from the point of foliage contact to and into the root system. Visible effects are a gradual wilting and yellowing of the plant that advances to complete browning of aboveground growth and deterioration of underground plant parts. Effects are visible on most annual weeds within 2 to 4 days, but on most perennial weeds, effects might not be visible for 7 or more days after application. Extremely cool or cloudy weather following application could slow activity of this product and delay development of visual symptoms.

Maximum Application Rates: The maximum application or use rates stated throughout this label are given in units of volume (fluid ounces or quarts) of this product per acre. However, the maximum allowable application rates apply to this product combined with the use of any and all other herbicides containing the active ingredient glyphosate, whether applied separately or in a tank mixture, on a basis of total pounds of glyphosate (acid equivalents) per acre. If more than one glyphosate-containing product is applied to the same site within the same year, you must ensure that the total use of glyphosate (pounds acid equivalents) does not exceed the maximum allowed. See the "INGREDIENTS" section of this label for necessary product information.

Unless otherwise specified on this label, the combined total of all applications of this product on a site must not exceed 8 quarts (8 pounds of glyphosate acid) per acre per year.

NOTE: Use of this product in any manner not consistent with this label could result in injury to persons, animals, crops or other desirable vegetation, or have other unintended consequences.

6.0 WEED RESISTANCE MANAGEMENT

GROUP	9	HERBICIDE
-------	---	-----------

Glyphosate, the active ingredient in this product, is a Group 9 herbicide based on the mechanism of action classification system of the Weed Science Society of America. Any weed population can contain plants that are naturally resistant to Group 9 herbicides. Weeds resistant to Group 9 herbicides can be effectively managed by using another herbicide from a different Group (either alone or in a mixture according to label directions), by using other cultural or mechanical methods of weed control, or a combination of the two. Consult your local company representative, state cooperative extension agent, professional consultant or other qualified authority to determine appropriate actions for controlling specific resistant weeds.

6.1 Weed Management Practices

Resistant populations arise when rare individual plants are uncontrolled by a normal dose of a given herbicide under normal environmental conditions. In the absence of other control measures these individuals survive, produce seed, and eventually become the dominant biotype in the field through continuous selection. The best means of reducing this selection is to use diverse weed control practices such as multiple herbicides with different mechanisms of action, and often in combination with various mechanical and cultural practices.

To minimize the occurrence of herbicide-resistant biotypes, including those resistant to glyphosate, implement the following weed management practice options that are practical to your situation. These management practices are applicable to reduce the spread of confirmed resistant biotypes (managing existing resistant biotypes) and to reduce the potential for selecting for resistance in new species (proactive resistance management).

- Use a diversified approach toward weed management focused on preventing weed seed production and reducing the number of weed seeds in the soil.
- Plant crops into fields that are as weed-free as possible and then keep them as weed-free as possible.
- Plant seed that is as weed-free as possible.
- Scout fields and application sites routinely, before and after herbicide application.
- Use multiple herbicide mechanisms of action that are effective against the most troublesome weeds at your application site and against those with known resistance.
- Apply herbicides at application rates listed on the label when weeds are within the size range indicated on the label.
- Emphasize cultural practices that suppress weeds by using crop competitiveness.
- Use mechanical and biological weed management practices, where appropriate.
- Prevent field-to-field and within-field movement of weed seed or vegetative propagules.
- Manage weed seed at harvest and after harvest to prevent a buildup of the weed seedbank.

6.2 Management of Glyphosate-Resistant Biotypes

Appropriate testing is needed to determine if a weed is resistant to glyphosate. Call 1-800-ROUNDUP (1-800-768-6387) or contact your Monsanto Company representative to determine if resistance in any particular weed biotype has been confirmed in your area, or visit on the Internet at www.weedresistance.com or www.weedscience.org.

Glyphosate-resistant weeds can be controlled or managed by applying this product in combination with residual preemergence herbicides and/or other postemergence herbicides labeled for control of the targeted weed in the crop being grown or on the site of application. For more information, see the "WEEDS CONTROLLED" section of this label.

Since the occurrence of resistant weeds is difficult to detect prior to use, Monsanto Company accepts no liability for any losses that result from the failure of this product to control resistant weeds.

7.0 MIXING

Spray solutions of this product may be mixed, stored and applied using clean stainless steel, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS.

Eliminate any risk of siphoning the contents of the tank back into the carrier source while mixing. Use approved anti-back-siphoning devices where required by state or local regulations.

A 50-mesh nozzle screen or line strainer on the spray equipment is adequate.

Clean sprayer parts promptly after using this product by thoroughly flushing with water.

7.1 Mixing with Water

PERFORMANCE OF THIS PRODUCT CAN BE SIGNIFICANTLY REDUCED IF WATER CONTAINING SOIL SEDIMENT IS USED AS CARRIER. DO NOT MIX THIS PRODUCT WITH WATER FROM PONDS OR DITCHES THAT IS VISIBLY MUDDY OR MURKY.

This product mixes readily with water. Mix spray solutions of this product as follows. Begin filling the mixing tank or spray tank with clean water. Add the required amount of this product near the end of the filling process and mix gently. Foaming of the spray solution can occur during mixing. To prevent or minimize foaming, mix gently, terminate by-pass and return lines at the bottom of the tank and, if necessary, add an appropriate anti-foam or defoaming agent to the spray solution.

7.2 Surfactant

Unless otherwise directed, this product requires the addition of 2 or more quarts of a nonionic surfactant that is labeled for use with herbicides per 100 gallons of spray solution (0.5% or more by volume). Unless otherwise directed, use a higher concentration of surfactant when any of the following conditions apply to the use of this product:

- Adding surfactants that contain less than 70 percent active ingredient
- Making a broadcast application using a high carrier volume or using handheld spray equipment
- Applying under adverse growing conditions or anytime weeds are under stress
- Applying as a tank-mix with other products
- Applying to hard-to-control weeds, woody brush, trees and vines

NOTE: For direct application of spray solutions of this product on emerged aquatic weeds or for use in intertidal areas below the mean high-water mark, or in application areas where a buffer that will ensure no overspray of an adjacent body of water cannot be maintained, a surfactant that is also approved for aquatic use must be used. For terrestrial applications, surfactant is also needed in the spray solution, but does not have to be approved for aquatic use.

RESTRICTION: If a surfactant that is NOT approved for aquatic use is added to the spray solution, DO NOT apply directly to or over water or use in intertidal areas below the mean high-water mark.

Check with your local State agency with primary responsibility for regulating pesticides for additional information about surfactants that are approved for aquatic use.

Read and follow all precautionary statements and directions for use on the surfactant label.

All reference throughout this label to concentration of surfactant in the spray solution is on a percentage-of-volume basis. Refer to the table below to achieve the appropriate concentration of surfactant in the spray solution.

Desired Volume of Spray Solution	Amount of Surfactant to Achieve Indicated Concentration in Spray Solution (percent by volume)					
	0.5%	0.75%	1%	1.5%	4%	8%
1 gallon	2/3 fl oz	1 fl oz	1.3 fl oz	2 fl oz	5 fl oz	10 fl oz
25 gallons	16 fl oz	24 fl oz	1 qt	1.5 qts	4 qts	2 gals
100 gallons	2 qts	3 qts	1 gal	1.5 gals	4 gals	8 gals

2 tablespoons = 1 fluid ounce (fl oz)

7.3 Tank Mixtures

This product does not provide residual weed control. This product may be tank-mixed with other herbicides to provide residual weed control in the soil, a broader weed control spectrum or an alternative mechanism of action.

NOT ALL TANK-MIX PRODUCTS LISTED ON THIS LABEL ARE APPROVED FOR USE ON AQUATIC SITES. Refer to each individual label for all products in the tank mixture for approved use sites and application rates.

When a tank-mix with a generic active ingredient, such as 2,4-D or dicamba, or any other product or material, is listed on this label, the user is responsible for ensuring that the specific application being made and the use site is included on the label of the product used in the mix.

Monsanto Company has not tested all tank-mix product formulations for compatibility, antagonism or reduction in product performance. Mixing this product with herbicides or other materials not specified on this label could result in reduced performance of this product. To the extent consistent with applicable law, buyer and all users are responsible for any loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not expressly specified on this label, or on separate supplemental labeling or Fact Sheets published for this product.

Refer to all individual product labels, supplemental labeling and Fact Sheets for all products in the tank mixture, and observe all precautions and limitations on the label, including any application timing restrictions, soil restrictions, minimum re-cropping intervals and/or crop rotation restrictions. Use according to the most restrictive precautionary statements for each product in the tank mixture.

This product may be applied at any rate listed on this label in a tank mixture with the following products to provide preemergence and/or improved postemergence control of weeds listed on the individual product labels.

Arsenal; Arsenal Herbicide Applicators Concentrate; Banvel; Banvel 480; Barricade 4L; Barricade 65WG; Certainty® Turf; Chopper Gen2; Crossbow; Endurance; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XLT Specialty; Gallery SC; Gallery 75 Dry Flowable Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Goal 2XL; Goafender; Habitat; Hyvar X; Hyvar X-L; Karmex DF; Krenite S Brush Control Agent; Krovar I DF; Landmark; Landmark XP; Oust Extra; Oust XP; Outrider®, Plateau; Poast; Poast Plus; Ronstar 50 WSP; Ronstar Flo; Ronstar G; Sahara DG; Spike 20P Specialty; Spike 80 DF Specialty; Stalker; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Surflan Pro; Telar XP; Tordon 101 Mixture Specialty; Tordon 22K Specialty; Tordon K Herbicide Specialty; Transline Specialty; Vanquish; Velpar DF CU; Velpar DF VU; Velpar L CU; Velpar L VU; 2,4-D; atrazine; dicamba; bromacil; diuron; imazapyr; metsulfuron methyl; oryzalin; pendimethalin; prodiamine; simazine; sulfosulfuron; trichlopyr

When used in combination as described on this label and to the extent consistent with applicable law, the liability of Monsanto shall in no manner extend to any damage, loss or injury not solely and directly caused by the inclusion of the Monsanto product in such combination use.

7.4 Tank-Mixing Procedure

Always predetermine the compatibility of all tank-mix products in the carrier by mixing small proportional quantities in advance.

Add individual tank-mix components to the tank as follows: wettable powders; flowables; emulsifiable concentrates; drift reduction additives; water soluble liquids (this product); nonionic surfactants. Ensure that the tank-mix products are well mixed in the spray solution before adding this product.

Mix only the quantity of spray solution that will be applied that day. Application of tank-mix solutions that are allowed to stand overnight could result in reduced weed control.

Maintain gentle agitation at all times until the contents of the tank are sprayed out. If the spray mixture is allowed to settle, agitate thoroughly to resuspend the mixture before resuming application.

Keep by-pass line on or near the bottom of the tank to minimize foaming.
A 50-mesh nozzle screen or line strainer on the spray equipment is adequate.

7.5 Mixing Spray Solution Concentrations

All reference throughout this label to concentration of this product in a spray solution is on a percentage-of-volume basis.

Prepare the desired volume of spray solution at a given concentration by mixing the amount of this product indicated in the following table with water.

Desired Volume of Spray Solution	Amount of Roundup Custom for Aquatic and Terrestrial Use to Achieve Indicated Concentration in Spray Solution (percent by volume)					
	0.5%	0.75%	1%	1.5%	4%	8%
1 gallon	2/3 fl oz	1 fl oz	1.3 fl oz	2 fl oz	5 fl oz	10 fl oz
25 gallons	16 fl oz	24 fl oz	1 qt	1.5 qts	4 qts	2 gals
100 gallons	2 qts	3 qts	1 gal	1.5 gals	4 gals	8 gals

2 tablespoons = 1 fluid ounce (fl oz)

For filling backpack and pump-up sprayers, consider mixing the appropriate amount of this product with water in a larger container and then filling the sprayer from the larger container.

7.6 Colorants and Dyes

Colorants and marking dyes may be added to spray solutions of this product; however, they could reduce the performance of this product. Use colorants and dyes according to the manufacturer's directions.

7.7 Drift Reduction Additives

Drift reduction additives may be used with all application equipment types, except wiper applicators, sponge bars and controlled droplet applicators (CDA). When a drift reduction additive is used, read and carefully follow all precautions, limitations and all other information appearing on the product label. The use of drift reduction additives can affect spray coverage, which could result in reduced performance of this product.

8.0 APPLICATION EQUIPMENT AND TECHNIQUES

This product may be applied using the following equipment:

Aerial Application Equipment—fixed-wing and helicopter

Ground Application Equipment—boom or boomless systems, pull-type sprayers, floaters, pick-up sprayers, spray coupes and other ground broadcast application equipment

Handheld Sprayers—backpack sprayers, pump-up pressure sprayers, handguns, handwands, mistblowers*, lances and other handheld and motorized spray equipment used to direct the spray onto weed foliage.

*This product is not registered in California or Arizona for use in mistblowers.

Selective Application Equipment—recirculating sprayer, shielded and hooded sprayers, wiper applicator, sponge bar, single or hollow stem injectors, tree injector, spray bottle

Injection Systems—aerial or ground injection sprayers

Controlled Droplet Applicator (CDA)—handheld or boom-mounted applicators that produce a spray consisting of a narrow range of droplet sizes

APPLY THIS PRODUCT USING PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF ACCURATELY DELIVERING DESIRED VOLUMES.

Do not apply this product through any type of irrigation system.

8.1 Spray Drift Management

AVOID CONTACT OF THIS HERBICIDE WITH FOLIAGE, GREEN STEMS, EXPOSED NON-WOODY ROOTS OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES, AS SEVERE PLANT INJURY OR DESTRUCTION COULD RESULT.

Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation, as even small quantities of this product can cause severe damage or destruction to the crop, plants or other vegetation on which application was not intended.

AVOID DRIFT. USE EXTREME CARE TO PREVENT INJURY TO DESIRABLE PLANTS AND CROPS WHEN APPLYING THIS PRODUCT.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator and the

grower are responsible for considering all these factors when making decisions regarding the application of this product.

The likelihood of injury occurring as the result of spray drift while applying this product increases when winds are gusty, as wind velocity increases, when wind direction is constantly changing or when there are other meteorological conditions that favor spray drift. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or generation of fine particles (mist) that are likely to drift.

TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, APPROPRIATE BUFFERS MUST BE MAINTAINED. AVOID APPLYING THIS PRODUCT AT EXCESSIVE SPEED OR SPRAYER PRESSURE.

8.2 Aerial Application Equipment

Unless otherwise prohibited, all broadcast applications of this product described on this label may be made using aerial application equipment where appropriate, provided that the applicator complies with the precautions and restrictions specified on this label and on separate supplemental labeling published for this product.

DO NOT APPLY THIS PRODUCT USING AERIAL APPLICATION EQUIPMENT EXCEPT UNDER CONDITIONS SPECIFIED ON THIS LABEL OR ON SEPARATELY PUBLISHED SUPPLEMENTAL LABELING FOR THIS PRODUCT.

FOR SPECIFIC USE INSTRUCTIONS, RESTRICTIONS AND REQUIREMENTS RELATED TO THE AERIAL APPLICATION OF THIS PRODUCT IN CALIFORNIA OR SPECIFIC COUNTIES THEREIN, REFER TO THE LIMITATIONS ON AERIAL APPLICATION IN THAT STATE OR COUNTY PRESENTED IN THIS SECTION.

Apply this product at the rate specified on this label in 3 to 25 gallons of water per acre, unless otherwise directed. Use a larger spray volume within this range where weeds, brush, trees and vines are dense or form multiple canopy layers.

Avoid direct application to any body of water.

Drift control reduction additives may be used.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

Aircraft Maintenance

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES COULD RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR IS MOST SUSCEPTIBLE. Maintaining an organic coating (paint) that meets aerospace specification MIL-C-38413 can help prevent corrosion.

AERIAL SPRAY DRIFT MANAGEMENT

The following drift management requirements must be followed to minimize off-target drift movement during aerial application. These requirements do not apply to forestry applications.

1. The distance of the outermost nozzles on the boom must not exceed $\frac{3}{4}$ the length of the wingspan or rotor.
2. Nozzles must always point backwards parallel with the air stream and never be pointed downwards more than 45 degrees. Where states have more stringent regulations, they must be followed.

Importance of Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if the application is made improperly or under unfavorable environmental conditions, such as in windy, high temperature with low humidity, and/or inversion conditions as described below.

Controlling Droplet Size

- **Volume:** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets.
- **Pressure:** Operate at a spray pressure towards the lower end of the range listed for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of nozzles:** Use the minimum number of nozzles that provides uniform coverage.
- **Nozzle orientation:** Orienting nozzles so that the spray is released backwards, parallel to the air stream, will produce larger droplets than other orientations. Significant deflection from the horizontal will reduce droplet size and increase drift potential.
- **Nozzle type:** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce larger droplets than other nozzle types.
- **Boom length:** For some use patterns, reducing the effective boom length to less than $\frac{3}{4}$ of the wingspan or rotor length can further reduce drift without reducing swath width.
- **Application height:** Application must be made at a height of 10 feet or less above the top of the tallest plants, unless a greater height is required for aircraft safety. Making the application at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

Swath Adjustment

When an application is made in the presence of a crosswind, the swath will be displaced downwind. Therefore, on the upwind and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Increase the swath adjustment distance with increasing drift potential (higher wind, smaller droplets, etc.).

Wind

Drift potential is lowest at wind speeds of between 2 and 10 miles per hour. However, many factors, including droplet size and equipment type, determine drift potential at any given wind speed. Avoid application when wind speeds are below 2 miles per hour due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator must be familiar with local wind patterns and how they affect drift.

Temperature and Humidity

When making an application in low relative humidity, set application equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Do not apply this product during a temperature inversion as drift potential is high under these conditions. Temperature inversions restrict vertical air mixing, which causes small droplets to remain suspended in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

Apply this product only when the potential for drift to adjacent sensitive non-target areas (e.g., residential areas, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from a sensitive area).

State Specific Limitations on Aerial Application

LIMITATIONS ON AERIAL APPLICATION IN CALIFORNIA ONLY

DO NOT apply this product using aerial application equipment in residential areas.

AVOID DRIFT – DO NOT APPLY WHEN WINDS ARE GUSTY OR UNDER ANY OTHER CONDITION THAT FAVORS DRIFT. DRIFT OF THIS PRODUCT ONTO ANY VEGETATION TO WHICH APPLICATION WAS NOT INTENDED CAN CAUSE DAMAGE. TO PREVENT INJURY TO ADJACENT DESIRABLE VEGETATION, USE PROPER AERIAL APPLICATION EQUIPMENT FITTED WITH APPROPRIATE NOZZLES AND MAINTAIN ADEQUATE BUFFERS.

Follow the directions below when making an aerial application near non-target crops, desirable annual vegetation, or desirable perennial vegetation after bud break and before total leaf drop.

1. Do not apply this product within 100 feet of all desirable vegetation or non-target crops.
2. If winds are blowing up to 5 miles per hour TOWARD desirable vegetation or non-target crops, do not apply this product within 500 feet of the desirable vegetation or crops.
3. If winds are blowing between 5 and 10 miles per hour TOWARD desirable vegetation or non-target crops, a buffer zone greater than 500 feet might be needed to protect the desirable vegetation or crops.
4. Do not apply this product using aerial application equipment when winds are blowing in excess of 10 miles per hour.

5. Do not apply this product using aerial application equipment when inversion conditions exist.

When tank-mixing this product with 2,4-D, only 2,4-D amine formulations may be applied in California using aerial application equipment. Tank mixtures of this product with 2,4-D amine formulations may be applied by air in California on fallow fields and in reduced tillage systems and for pasture renovation applications only.

This product, when tank-mixed with dicamba, may not be applied by air in California.

ADDITIONAL LIMITATIONS ON AERIAL APPLICATION

IN FRESNO COUNTY, CALIFORNIA ONLY

Always read and follow the label directions and precautionary statements for all products used in the aerial application.

The following information applies only from February 15 through March 31 within the following boundaries of Fresno County, California:

North: Fresno County line
South: Fresno County line
East: State Highway 99
West: Fresno County line

Observe the following directions to minimize off-site movement during aerial application of this product. Minimization of off-site movement is the responsibility of the grower, Pest Control Advisor and aerial applicator.

Written Directions

Written directions MUST be submitted by or on behalf of the applicator to the Fresno County Agricultural Commissioner 24 hours prior to the application. These written directions MUST state the proximity of surrounding crops and that conditions of each manufacturer's product label and this label have been satisfied.

Aerial Applicator Training and Equipment

Aerial application of this product is limited to pilots who have successfully completed a Fresno County Agricultural Commissioner and California Department of Pesticide Regulation approved training program for aerial application of herbicides. All aircraft must be inspected, critiqued in flight and certified at a Fresno County Agricultural Commissioner approved fly-in. Test and calibrate spray equipment at intervals sufficient to ensure that proper rates of herbicides and adjuvants are being applied during commercial use. Applicator must document such calibrations and testing. Demonstration of performance at Fresno County Agricultural Commissioner approved fly-ins constitutes such documentation, or other written records showing calculations and measurements of flight and spray parameters acceptable to the Fresno County Agricultural Commissioner.

Applications at Night – Do not apply this product by air earlier than 30 minutes prior to sunrise and/or later than 30 minutes after sunset without prior permission from the Fresno County Agricultural Commissioner.

For additional information on the proper aerial application of this product in Fresno County, call (800) 332-3111.

8.3 Ground Application Equipment

Apply this product at the appropriate rate as specified on this label in 3 to 40 gallons of water per acre when making a broadcast application using ground application equipment, unless otherwise directed on this label or on separate supplemental labeling or Fact Sheets published for this product. As the weed density increases, increase the spray volume toward the upper end of this range to ensure complete coverage. Use nozzles that will avoid generating a fine mist. For enhanced results with ground application equipment, use flat-fan nozzles. Check spray pattern for uniform distribution of spray droplets.

8.4 Handheld Sprayers

When using a handheld sprayer, apply spray solutions of this product uniformly and completely to the foliage of target weeds using a coarse droplet spectrum and a spray-to-wet technique; do not spray to the point of runoff. For the appropriate concentration of this product in the spray solution and timing of application to control specific weeds, woody brush, trees and vines, refer to the "WEEDS CONTROLLED" section of this label.

For control of annual weeds, make application when weeds are small and prior to seedhead or bud formation. For control of perennial weeds, woody brush, trees and vines, make application after flowering and before fall color and leaf drop.

When making a low-volume directed spray application to annual and perennial weeds, woody brush, trees and vines using a handheld sprayer, ensure that at least 50 to 75 percent of the foliage or the top one-half of each unwanted plant is sprayed. If a straight stream nozzle is used, start the application at the top of the targeted plant and spray from top to bottom in a lateral zig-zag motion. To ensure uniform and complete coverage, spray both sides of large or tall woody brush, trees and vines, or when foliage is thick and dense, or where there are multiple sprouts. For enhanced results on woody brush, trees and vines, apply to actively growing vegetation after full leaf expansion and flowering, prior to fall color and leaf drop.

The following table summarizes various methods of foliar application using a backpack sprayer with a spray-to-wet or low-volume directed spray technique and high-volume sprayer application using handheld application equipment for control or partial control of herbaceous weeds, woody brush, trees and vines listed in the "WEEDS CONTROLLED" section of this label.

Method of Application	Spray Solution Concentration	Spray Volume
Handgun or Backpack Sprayer	0.5 to 1.5% by volume	Spray-to-wet technique
Low-Volume Directed Spray (Backpack)	4 to 8% by volume	15 to 25 gallons/acre
Modified High-Volume Spray	1.5 to 3% by volume	40 to 60 gallons/acre

Low-volume directed spray application with a backpack sprayer works best when applying to weeds and brush less than 10 feet tall. For taller weeds and brush, a high-volume handgun can be modified by reducing the nozzle size and spray pressure to produce a modified high-volume directed spray application.

8.5 Selective Application Equipment

Selective application equipment allows this product to be applied to weeds growing near a crop or other desirable vegetation without killing the desirable vegetation. Selective application equipment must be capable of preventing all contact of the herbicide solution with the desirable vegetation and operated without spray mist escape, leakage or dripping of the herbicide solution.

AVOID CONTACT OF THIS HERBICIDE WITH DESIRABLE VEGETATION. Contact of this product with desirable vegetation could result in unwanted plant damage or destruction. To the extent consistent with applicable law, such damage shall be the sole responsibility of the applicator.

This product may be diluted with water and applied using a recirculating sprayer, shielded sprayer, hooded sprayer, wiper applicator or sponge bar to weeds listed on this label growing in any aquatic or on any terrestrial non-food or non-feed crop site listed on this label, where feasible. This product may also be used with sprayers equipped with optical weed sensor technology. Other selective equipment that may be used to deliver or apply this product are single and hollow stem injectors, tree injectors, wiper applicators for cut stem and cut stump applications, and spray or squirt bottles for cut stem, cut stump and frill applications to control large stem weeds, brush, trees and vines listed on this label.

Recirculating Sprayer

A recirculating sprayer directs the spray solution onto weeds growing above desirable vegetation, while spray solution that is not intercepted by weeds is collected and returned to the spray tank for reapplication. A recirculating sprayer may be used to apply spray solutions of this product to weeds listed on this label in any aquatic or on any terrestrial non-crop site described on this label.

Shielded and Hooded Sprayers

A shielded sprayer directs the herbicide solution to the target weeds while protecting desirable vegetation from coming into contact with the herbicide spray with an impervious material or shield. Use nozzles that provide uniform coverage within the application area. Keep shields properly adjusted to protect desirable vegetation.

A hooded sprayer is a type of shielded sprayer where the spray pattern is fully enclosed, including the top, sides, front and back, thereby shielding desirable vegetation from the spray solution.

This product may be diluted with water and, unless otherwise directed, mixed with a surfactant and applied using a shielded or hooded sprayer to weeds listed on this label growing in any aquatic or on any terrestrial non-crop site listed on this label, where feasible, and between rows of plants (row middles) in any cropping system listed on this label.

Properly adjust the hood to protect desirable vegetation. Ensure that the hood is capable of completely enclosing the spray pattern. If necessary when applying around crops grown on raised beds, extend the front and rear flaps of the hooded sprayer downward to reach the ground in deep furrows.

A hooded sprayer must be configured and operated in a manner that minimizes bouncing and avoids raising the hood up off the ground surface at any time. If the hood is raised, spray particles can escape and come

into contact with the crop or other desirable vegetation, causing damage to or destruction of the desirable vegetation. Avoid operating this equipment on rough or sloping terrain where the spray hood is likely to rise up off the ground surface.

Use hoods designed to minimize excessive dripping or runoff down the inside of the hood, such as a single, low pressure, low drift, flat-fan nozzle with an 80- to 95-degree spray angle positioned at the top center of the hood, with a spray volume of 20 to 30 gallons per acre.

The following procedures will help reduce the potential for injury to desirable vegetation when using a hooded sprayer:

- Operate the sprayer with the hood on the ground or skimming across the ground surface.
- Leave at least an 8-inch untreated strip over the drill row. (For example, if a crop row width is 38 inches, use a sprayer hood with a maximum width of 30 inches.)
- Operate at a ground speed no greater than 5 miles per hour to minimize bouncing of the hooded sprayer.
- Apply when wind speed is 10 miles per hour or less.
- Use low-drift nozzles that provide uniform coverage within the application area.

Injury to a crop or other desirable vegetation can occur when application is made to foliage of weeds that come into direct contact with the desirable vegetation. Do not apply this product when leaves of desirable vegetation are growing in direct contact with weeds. Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation can result in discoloration, stunting or destruction.

Wiper Applicator

A wiper applicator is a device that physically wipes this product or solutions of this product directly onto the weed or cut stump. Any handheld device that is capable of physically wiping this product or solutions of this product directly onto the target weed or stump, such as a paint brush, may be used.

A mechanical wiper applicator, such as a rope wick or sponge bar that can be driven through a field over the top of a crop or other desirable vegetation to control weeds that are taller than the desirable vegetation, must be designed, maintained and operated to prevent the herbicide solution from coming into contact with desirable vegetation.

Wiper applicators may be used over the top of food or feed crops ONLY if specifically permitted for use over that crop by this label or by separately published supplemental labeling for this product.

When using a mechanical wiper applicator, adjust the height of the applicator to ensure adequate contact with the weeds and so that the wiper contact point is at least 2 inches above the crop or desirable vegetation. Enhanced results can be obtained when more of the weed is exposed to the herbicide solution and weeds are a minimum of 6 inches above the desirable vegetation. Weeds that do not come into contact with the herbicide solution will not be affected. Poor contact can occur when weeds are growing in dense clumps, when operating in areas of severe weed infestation, or when weed height varies dramatically. In these situations, more than one application of this product might be necessary.

Operate wiper applicators at a ground speed of no greater than 5 miles per hour. Performance in areas of heavy weed infestation can be improved by reducing speed, which will provide more time for re-saturation of the wiper with the herbicide solution and more contact time of the wiper with the weed. Enhanced results with a wiper applicator can be obtained when two applications are made traveling in opposite directions in the field.

Keep wiper surfaces clean.

Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation can result in discoloration, stunting or destruction. Avoid leakage or dripping onto desirable vegetation. Be aware that on sloping ground the herbicide solution can migrate to one side, causing dripping on the lower end and drying of the wiper on the upper end of the applicator.

Do not apply this product using a wiper applicator when weeds are wet.

Add a nonionic surfactant to a concentration of 10 percent by volume of the total applicator solution (one gallon of surfactant for every 10 gallons of solution) for use in a wiper applicator. See the "MIXING" section of this label for more information on the use of surfactants.

For Rope Wick and Sponge Bar Applicators-apply solutions ranging from 33 to 75 percent of this product by volume in water.

For Panel Applicators-apply solutions ranging from 33 to 90 percent of this product by volume in water. Mix only the amount of this product that will be used during a 1-day period, as reduced product performance can result from the use of solutions held in storage.

Clean wiper parts promptly after using this product by thoroughly flushing with water.

Single and Hollow Stem Injectors

Control of certain weeds listed in the "WEEDS CONTROLLED" section can be obtained by injecting this concentrated product or solutions of this product directly in or onto the target weed. Ensure that the handheld injector being used for this application is capable of accurately delivering the volume specified on the label. When making stem injections, the combined total use of this product must not exceed 8 quarts per acre per year. At 5 milliliters of concentrated (undiluted) product per stem, 8 quarts will treat approximately 1500 stems per acre per year. The number of stems that can be treated per acre will vary depending on the injection volume and the concentration of this product in the application solution.

8.6 Injection Systems

This product may be used in aerial and ground injection spray systems as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix this concentrated product with the undiluted concentrate of other products when using injection systems, unless otherwise directed. A non-ionic surfactant concentration of 0.5% or more in the spray stream is required for use of this product in injection systems.

8.7 Controlled Droplet Applicator (CDA)

The amount of this product applied per acre using a controlled droplet applicator (CDA) must be no less than the rate specified on this label for application using conventional broadcast application equipment.

A controlled droplet applicator produces a spray pattern that is not easily visible. Use extreme care to avoid spray or drift from contacting the foliage or any other tissue of desirable vegetation, as plant damage or destruction could result.

9.0 AQUATIC AND TERRESTRIAL USE SITES

This product may be used according to the directions for use described on this label to control weeds, woody brush, trees and vines listed on this label growing in aquatic environments and on any terrestrial site described on this label.

9.1 Aquatic Sites

This product may be used to control emerged weeds, brush, trees and vines in all flowing, non-flowing or transient bodies of fresh and brackish surface water. These bodies of water include lakes, rivers, streams, ponds, estuaries, rice levees, seeps, irrigation and drainage ditches, canals, reservoirs, wetlands and wastewater treatment facilities. This product may also be used to control weeds in intertidal areas below the mean high-water mark and on terrestrial sites where bodies of water may be present and a buffer that will ensure no overspray of the water cannot be maintained.

When applying spray solutions of this product in or near aquatic sites, a nonionic surfactant that is labeled for use with herbicides and approved for direct application to bodies of water must be used. See the "MIXING" section of this label for more information on the use of surfactants with this product.

Before using this product for aquatic weed control or for terrestrial weed control near aquatic sites, read the following information carefully.

- This product does not control plants that are completely submerged or have a majority of their foliage under water.
- There is no restriction on the use of water for irrigation, recreation or domestic purposes following direct application of this product to emerged aquatic plants.
- Consult your local State agency with primary responsibility for regulating pesticides, State fish and wildlife agency and/or water control authority before applying this product to vegetation growing in public waters to determine if a permit is required.
- Do not apply this product directly to water within 0.5 mile upstream of an active potable water intake in flowing water (i.e., river, stream, etc.) or within 0.5 mile of an active potable water intake in a standing body of water, such as a lake, pond or reservoir. To make aquatic applications around and within 0.5 mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 parts per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds that would permit the turning off of an active potable water intake for a minimum period of 48 hours after the application. This restriction does NOT apply to intermittent inadvertent overspray of water on terrestrial use sites.
- To achieve maximum weed control in dry ditches, apply this product within 1 day after water drawdown to ensure application to actively growing weeds and allow a minimum of 7 days after application before reintroduction of water.
- Floating mats of vegetation could require more than one application of this product for control. Avoid washing this product off of foliage after application by boat backwash or rainfall within 4 hours of application. Wait a minimum of 24 hours before re-applying this product to the same vegetation.
- Application of this product to moving bodies of water must be made while traveling upstream to prevent concentration of this herbicide in the water.
- When making a bankside application, do not overlap more than 1 foot into open water.
- Do not apply this product to bodies of water where emerged weeds do not exist.
- If applying this product to more than 20 percent of the total area of a body of water, do not apply more than 3.75 quarts per acre in any single broadcast application. If applying to less than 20 percent of the total area of a body of water, any rate listed on this label may be applied. This single application rate restriction does not apply to stream crossings in utility rights-of-way.
- When emerged weed infestations cover the total surface area of an impounded waterbody, apply this product to the emerged vegetation in strips to help avoid oxygen depletion in the water due to decaying vegetation. Oxygen depletion in the water can result in increased fish mortality.

TANK MIXTURES: This product may be applied in a tank mixture with one or more of the following products for enhanced control of aquatic weeds, woody brush, trees and vines in aquatic sites, provided that the product used is labeled for aquatic use. Refer to the individual label of all products used in the tank mixture for approved uses and application rates. Always read and follow label directions for each product in the mix.

Clipper; Garlon 3A Specialty; Habitat; 2,4-D amine; imazapyr; flumioxazin; triclopyr

9.2 Terrestrial Sites

This product may be used according to the directions for use described on this label to control weeds, woody brush, trees and vines listed on this label on any terrestrial site described on this label.

This product may be used to control weeds, woody brush, trees and vines on maintained landscapes, on improved and unimproved land, on lawns and turf and around ornamentals on industrial, commercial and

residential sites, including airports, apartment complexes, chaparrals, ditch banks, driveways, dry ditches, dry canals, farmsteads, fencerows, forestry sites, golf courses, greenhouses, lumber yards, manufacturing sites, municipal sites, natural areas, nurseries, office complexes, ornamental beds, parks, parking areas, pastures, petroleum tank farms, pumping installations, railroads, rangeland, recreational areas, residential areas, roadsides, schools, shadehouses, sod and turfgrass seed farms, sports complexes, storage areas, substations, utility rights-of-way, utility sites, warehouse areas, wildlife food plots and wildlife management areas.

This product may be used for non-selective control of unwanted vegetation on any site listed on this label for trim-and-edge application around objects, including around building foundations, equipment storage areas and trees, and along and in fences, and to eliminate unwanted weeds growing in and around established shrub beds and ornamental plantings. This product may also be used for complete elimination of vegetation from a terrestrial site prior to planting ornamentals, flowers, or turfgrass (sod or seed), and prior to land development, including prior to beginning construction projects or the laying of asphalt or other road material. Application of this product may be repeated, as needed, to maintain bare ground, up to a total application of 8 quarts per acre per year.

This product may be used for establishment and maintenance of fuel breaks, for establishing fire perimeters and black lines, along fire roads and to facilitate prescribed burning practices on any site described on this label.

This product may also be used for weed control or growth regulation on Christmas tree farms, citrus orchards, farmsteads, production nurseries, sugarcane fields, sod farms and turfgrass seed farms.

This product requires the addition of a nonionic surfactant to the spray solution labeled for herbicide application. See the "MIXING" section of this label for more information on the use of surfactants with this product.

Unless otherwise directed, application of this product may be made according to the directions for use in the sections that follow on any of these sites using any method of application described on this label to control any weeds, woody brush, trees and vines listed in the "WEEDS CONTROLLED" section of this label.

10.0 ADDITIONAL SITE MANAGEMENT INFORMATION

The following sections contain additional use information specifically related to certain use sites. Unless otherwise directed, any application of this product described in the "WEEDS CONTROLLED" section or any other section of this label may be made on the use sites described in the sections that follow, where applicable, using any method of application described on this label that is appropriate.

10.1 Forestry, Hardwood and Christmas Tree Site Management

This product may be used for control or partial control of woody brush, trees and herbaceous weeds on any tree site, including forestry settings, Christmas tree plantations, and silvicultural and production nursery sites, using any method of application listed on this label. See the "WEEDS CONTROLLED" section of this label for application rates and specific use directions.

Unless otherwise directed, this product requires a nonionic surfactant that is labeled for the intended use on the site of application to be added to the spray mixture. Use of this product without a surfactant will result in reduced performance. See the "MIXING" section of this label for more information on the use of surfactants with this product.

IMPORTANT: SOME SURFACTANTS CAN CAUSE TREE INJURY WHEN DIRECTLY APPLIED TO SOME SPECIES. READ AND FULLY UNDERSTAND ALL APPROVED USES, PRECAUTIONS AND LIMITATIONS OF THE SURFACTANT BEFORE USING.

Weed Management, Site Preparation

This product may be used to control or partially control undesirable woody brush, trees, vines and herbaceous weeds listed on this label for preparing sites prior to planting any tree species, including Christmas trees, eucalyptus trees and hybrid tree cultivars, and for controlling weeds around established trees, for the release of conifer and hardwood trees, establishing wildlife openings and maintaining roads on any tree site.

TANK MIXTURES: This product may be applied in a tank-mix with the products listed in this section to increase the spectrum of vegetation controlled. Any application rate of this product listed on this label may be used in a tank-mix with the following products for tree site management, including site preparation, provided that the product is labeled for the use on the site of application and prior to planting the desired species. Refer to the individual label of all products used in the tank mixture for approved uses and application rates. Read and follow all directions for use and precautions for each product used, including planting interval restrictions, if any. Use this product according to the most restrictive precautionary statements of any product in the mix.

Arsenal; Arsenal Herbicide Applicators Concentrate; Chopper; Chopper GEN2; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Landmark; Landmark XP; Oust Extra; Oust XP; imazapyr; metsulfuron methyl; sulfometuron methyl; triclopyr

For control of herbaceous weeds, apply these tank-mix products at the lower end of the application rate range specified on the product label. For control or partial control of dense stands or for hard-to-control woody brush, trees and vines, apply these products at a rate or spray solution concentration towards the higher end of the given range.

Conifer Release, Mid-Rotation Conifer Release, Hardwood Release, Timber Stand Improvement

This product may be applied as a directed spray using a handheld sprayer or using any selective application equipment described on this label to control woody and herbaceous weeds and other undesirable understory vegetation below the tree crop canopy in conifer plantations, hardwood sites, Christmas tree plantations and silvicultural and ornamental nurseries to facilitate the release and growth of conifer and hardwood trees.

This product may also be applied using ground broadcast equipment or as a directed spray application for mid-rotation release under the canopy of pines, other conifers and hardwoods.

PRECAUTIONS: Avoid contact of spray drift, mist or drips with foliage, green bark or non-woody surface roots of desirable plant species. Use application techniques that prevent or minimize contact of this product with foliage of desired trees or other plants through direct contact or off-target spray movement.

Conifer Release – Broadcast Application

This product may be broadly applied over the top of conifer tree species listed in this section after formation of final conifer resting buds in the fall or prior to initial bud swelling in the spring for control, partial control or suppression of herbaceous weeds and hardwoods listed in the “WEEDS CONTROLLED” section of this label to facilitate the release of these tree species in a forestry, plantation or nursery setting. Unless otherwise directed, make this application only where conifers have been established for a minimum of one growing season.

PRECAUTIONS: Conifer injury can occur when this product is applied at rates higher than prescribed on this label, where spray applications overlap, if application is made when conifers are actively growing, or when they are growing under stress from drought, flood, improper planting or insect, animal or disease damage.

Conifer Release Outside the Southeastern United States

For release of the following conifer species growing for a minimum of one growing season in most areas outside the southeastern United States, apply 24 to 48 fluid ounces of this product per acre as a broadcast application over the top of the conifer trees.

- Douglas Fir
- Pines*
- Fir species
- California redwood
- Hemlock
- Spruce

* Includes all species except loblolly pine, longleaf pine, shortleaf pine or slash pine.

Apply 24 to 40 fluid ounces of this product for release of Douglas fir, pine and spruce that have been established for only one growing season (except in California).

For release of spruce (*Picea spp.*) in Maine, Michigan, Minnesota, New Hampshire and Wisconsin, up to 2.25 quarts of this product may be applied after formation of final resting buds in the fall for control of woody brush and tree species.

PRECAUTIONS: Ensure that the conifers are well hardened off before application of this product. Some nonionic surfactants can cause tree injury when broadly applied over the top of hemlock and California redwood and in mixed conifer stands. Test the nonionic surfactant to be used for tree safety before using.

Conifer Release in the Southeastern United States

For release of the following conifer species established for more than one growing season in the southeastern United States, apply 36 to 60 fluid ounces of this product per acre in the fall as a broadcast application over the top of the trees. For release of these species after only one growing season, apply only 24 fluid ounces of this product per acre.

- Eastern white pine
- Shortleaf pine
- Loblolly pine
- Slash pine
- Longleaf pine
- Virginia pine

TANK MIXTURES: This product may be applied for conifer release in a tank-mix with the following products to provide a broader spectrum of postemergence weed control and for residual control of weeds listed on the label of those products. Only apply these tank mixtures over the top of conifer species that are approved for this use for all products in the mix. Refer to the individual product labels for approved uses and application rates. Read and follow all directions for use and precautions for each product used. Use this product according to the most restrictive precautionary statements of any product in the mixture.

Arsenal; Arsenal Herbicide Applicators Concentrate; Oust Extra; Oust XP; atrazine; imazapyr; metsulfuron methyl; sulfometuron methyl

For release of Douglas fir established for a minimum of one growing season prior to bud swell in early spring, apply 24 fluid ounces of this product in a tank-mix with an appropriate rate of atrazine. Do not add surfactant for this application.

For herbaceous release of loblolly pine, Virginia pine and longleaf pine in the spring and early summer, apply 12 to 18 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Oust Extra or Oust XP.

Late-Summer and Fall after Resting Bud Formation

For release of jack pine, white pine and white spruce, apply 24 to 48 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Oust Extra or Oust XP that will not harm these conifer species.

For release of Douglas fir, apply 24 to 36 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Arsenal or Arsenal Herbicide Applicators Concentrate.

For release of balsam fir and red spruce, apply 48 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Arsenal or Arsenal Herbicide Applicators Concentrate.

10.2 Native and Wildlife Habitat Management

This product may be used to control exotic and other undesirable vegetation in wildlife habitat and natural areas, including riparian and estuarine areas, rangeland, and wildlife refuges. Application may be made to allow recovery of native plant species or prior to planting desirable native species, and for similar broad-spectrum vegetation control. Spot treatment, cut stump, cut stem, stem injection, wiper applicator and all other methods of application listed on this label may be used to selectively remove unwanted plants for habitat management and enhancement.

This product may also be used to eliminate annual and perennial weeds prior to planting wildlife food plots. Any wildlife food species may be planted after applying this product or native species may be allowed to repopulate the area naturally. If tillage is needed to prepare a seedbed, wait a minimum of 7 days after application before tilling to allow translocation of this product into underground plant parts.

10.3 Ornamental and Production Nursery Management

All uses of this product described on this label may be used in a plant nursery setting using any method of application described.

This product may be used to clear an area of unwanted vegetation prior to planting any ornamental plant, tree, shrub or other plants.

This product may also be used to control weeds growing around established woody ornamental species, such as arborvitae, azalea, boxwood, crabapple, eucalyptus, euonymus, fir, Douglas fir, jojoba, hollies, lilac,

magnolia, maple, oak, poplar, privet, pine, spruce and yew. This product may also be used to trim and edge around potted plants and other objects in a plant nursery.

PRECAUTIONS: Protect desirable plants from the spray solution using shields or coverings made of waterproof material. Take care to avoid contact of spray, drift or mist with foliage, green stems or immature bark of established ornamental species.

Greenhouse/Shadehouse

This product may be used to control weeds growing in and around greenhouses and shadehouses.

RESTRICTIONS: Desirable vegetation must not be present during application in a greenhouse. Turn air circulation fans off before applying this product inside a greenhouse or shadehouse and leave them off until the application solution has dried.

10.4 Commercial, Residential and Recreational Area Management

All applications of this product described on this label may be used on commercial, residential and recreational areas, including parks, schools and athletic fields, using any method of application described on this label, including spot treatment of unwanted vegetation, trim-and-edge application around trees, fences, walking paths, buildings, sidewalks, nature trails and other objects in these areas, to eliminate unwanted weeds growing in established shrub and ornamental beds, for turf management and renovation, and to eliminate vegetation from a site prior to development, including prior to planting an area to ornamentals, flowers or turfgrass (sod or seed), or beginning construction projects.

10.5 Pasture Management

The use of this product in pastures includes use on bahiagrass, bermudagrass, bluegrass, brome, fescue, guineagrass, kikuyugrass, orchardgrass, pangola grass, ryegrass, Timothy, and wheatgrass.

Preplant, Preemergence, Pasture Renovation

This product may be applied prior to planting or emergence of forage or perennial grasses. Refer to the “WEEDS CONTROLLED” section of this label for application rates of this product for control of specific weeds.

RESTRICTIONS: If the total application rate of this product is 2.25 quarts per acre or less, no waiting period between application and feeding or livestock grazing is required. If the rate is greater than 2.25 quarts per acre, remove domestic livestock before application and wait a minimum of 8 weeks after application before grazing or harvesting.

Spot Treatment, Wiper Applicator

This product may be applied in pastures as a spot treatment or over the top of desirable grasses using a wiper applicator to control taller growing weeds. For enhanced weed control, remove domestic livestock before application to allow for sufficient plant growth and wait a minimum of 7 days after application before grazing livestock or harvesting for feed. See additional instructions on the use of wiper applicators in the “APPLICATION EQUIPMENT AND TECHNIQUES” section of this label.

RESTRICTIONS: For spot treatment or use with a wiper applicator at rates of 2.25 quarts per acre or less, this product may be applied over the entire pasture or any portion of it. At rates greater than 2.25 quarts per acre, this product may be applied over no more than 10 percent of the total pasture at any one time. Application may be repeated in the same area at 30-day intervals.

Weed Suppression in Dormant Pastures

This product may be applied in dormant pastures to suppress competitive growth and seed production of annual weeds and other undesirable vegetation. Apply 9 to 12 fluid ounces of this product per acre using broadcast application equipment on pastures in late-fall after desirable perennial grasses have reached dormancy or in late-winter before desirable perennial grasses break dormancy and initiate green growth.

PRECAUTIONS: Higher application rates may be used for hard-to-control weeds; however, higher rates can cause stand reduction. Some stunting of perennial grasses can occur if broadcast application is made when they are not dormant.

RESTRICTIONS: No waiting period is required between application and grazing or harvesting for feed. Do not apply more than 2.25 quarts of this product per acre per year onto pasture grasses except for renovation. If reseeding is needed due to severe stand reduction, no waiting period is required after application of this product before seeding the pasture grasses listed at the beginning of this section; for all other pasture grasses, wait a minimum of 30 days after application before seeding.

10.6 Railroad Management

All uses of this product described in the “WEEDS CONTROLLED” or any other section of this label may be used on railroad sites using any method of application described.

This product requires a nonionic surfactant that is labeled for the intended use on the site of application to be added to the spray mixture. If application is to be made where aquatic sites might be directly sprayed or inadvertently oversprayed, the surfactant must be labeled for aquatic use. Use of this product without a surfactant will result in reduced performance. See the “MIXING” section of this label for more information on the use of surfactants with this product.

Application of this product along railroad rights-of-way may be made in up to 80 gallons of spray solution per acre.

Bare Ground, Ballast and Shoulders, Crossings, Spot Treatment

This product may be used to maintain bare ground on railroad ballast and shoulders and reduce the need for mowing and mechanical brush removal along railroad rights-of-way. Application of this product may be repeated as weeds continue to emerge in order to maintain bare ground, up to a maximum total application rate of 8 quarts of this product per acre per year.

TANK MIXTURES: This product may be applied in a tank mixture with the following products for enhanced control of woody brush and trees for bare ground, ballast and shoulder, crossing and spot treatment applications, and other brush, tree and vine control on railroad sites, provided that the product used is labeled for these applications. Not all tank-mix products listed are labeled for aquatic use. Refer to the individual label of all products used in the tank mixture for approved uses and application rates. Always read and follow label directions for each product in the mix.

Arsenal; Arsenal Herbicide Applicators Concentrate; Chopper; Chopper Gen2; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Habitat; Hyvar X; Hyvar X-L; Krovar I DF; Oust Extra; Oust XP; Outrider®; Princep 4L; Princep Caliber 90; Princep Liquid; Sahara DG; Scythe; Stalker; Spike 20P Specialty; Spike 80DF Specialty; Telar XP; Transline Specialty; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Vastlan Specialty; 2,4-D; atrazine; bromacil; chlorsulfuron; cloyralid; dicamba; diquat; diuron; hexazinone; imazapyr; metsulfuron methyl; pelargonic acid; simazine; sulfometuron methyl; sulfosulfuron; tebutiuron; triclopyr

Brush, Tree and Vine Control

This product may be used to control woody brush, trees and vines along railroad rights-of-way. Apply 3 to 8 quarts of this product per acre in up to 80 gallons of spray solution containing 0.5% or more by volume of a nonionic surfactant as a broadcast application using either a boom or boomless sprayer. Apply a 0.75- to 1.5-percent solution of this product when using high-volume application equipment with a spray-to-wet technique, or a 4- to 8-percent solution when using low-volume directed spray for spot treatment.

TANK MIXTURES: This product may be applied in a tank-mix with one or more of the following products for enhanced control of woody brush, trees and vines along railroad rights-of-way, provided that the product is labeled for use on these sites. Refer to the individual product label for approved sites and application rates.

Arsenal; Arsenal Herbicide Applicator's Concentrate; Chopper; Chopper Gen2; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Habitat; Krenite S Brush Control Agent; Stalker; Telar XP; Tordon 101 Mixture Specialty; Tordon 22K Specialty; Tordon K Herbicide Specialty; Transline Specialty; Vanquish; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Vastlan Specialty; chlorsulfuron; cloyralid; dicamba; fosamine; hexazinone; imazapyr; metsulfuron methyl; picloram; triclopyr

Weed Control in Dormant and Actively Growing Bermudagrass

This product may be used to control or partially control many annual and perennial weeds in dormant and actively growing bermudagrass along railroad rights-of-way. See the "WEEDS CONTROLLED" section of this label for directions for use of this product for weed control in grasses.

10.7 Rangeland Management

This product will control or suppress many annual weeds growing on perennial cool- and warm-season grass rangeland. Slight discoloration of the desirable grasses could occur, but will re-green and resume growing under moist soil conditions as effects of this product wear off.

Preventing seed production is critical to the control of invasive annual grassy weeds on rangeland. Yearly application of this product to eliminate invasive annual weeds before they produce seed will help eliminate viable weed seeds from the soil. Delay grazing of the area after application of this product to allow desirable perennials to grow, flower and re-seed the area.

Bromus Control: A broadcast application of 9 to 12 fluid ounces of this product per acre will control or suppress downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), soft chess (*Bromus mollis*), cheatgrass (*Bromus secalinus*), cereal rye and jointed goatgrass on rangeland. For enhanced results, apply this product when most brome plants are in early-flower and before the plants, including seedheads, turn color. Allow for secondary weed flushes to occur after spring rains to further deplete the seed reserve in the soil and encourage perennial grass conversion on weedy sites. Apply this product in the fall in areas where spring moisture is normally limited and fall germination allows for good weed growth and seed depletion.

Medusahead Control: To control or suppress medusahead, apply 12 fluid ounces of this product per acre at the 3-leaf stage. Delaying application beyond this stage will result in reduced or unacceptable control. Controlled burning prior to application of this product will eliminate the thatch layer produced by slowly decaying culms. Allow new weed growth to occur before applying this product after a burn. Repeat this application annually to eliminate medusahead seeds in the soil and allow desirable perennial grasses to repopulate the area.

RESTRICTIONS: Do not apply more than 2.25 quarts of this product per acre per year on rangeland. Do not use ammonium sulfate when applying this product on rangeland grasses. No waiting period between application of this product and feeding or livestock grazing is required.

10.8 Roadside Management

All uses of this product described on this label may be used for weed management along roadways, including weed control in dormant and active bermudagrass and bahiagrass, weed control along shoulders and under and around guardrails, signposts and other objects along the road, using any method of application described on this label. If applying this product in areas where the spray solution could inadvertently overspray a body of surface water, a non-ionic surfactant approved for aquatic use must be used. See the "MIXING" section of this label for more information on the use of surfactants with this product.

TANK MIXTURES: This product may be tank-mixed with the following products for shoulder, guardrail, spot treatment and maintaining bare ground applications, provided that the product used is labeled for use on these sites. Not all tank-mix products listed are labeled for aquatic use. Refer to the individual product labels for approved uses and application rates.

AAtrex 4L; AAtrex Nine-O; Banvel; Barricade 65WG; Chopper; Chopper Gen2; Crossbow; DIREX 4L; Escort XP; Endurance; Formula 40; Gallery 75 Dry Flowable Specialty; Gallery SC; Garlon 4; Garlon XRT; Hyvar X; Karmex DF; Krenite S Brush Control Agent; Krovar I DF; Landmark; Landmark XP; Oust Extra; Oust XP; Outrider®; Pendulum 3.3 EC; Pendulum AquaCap; Pendimax 3.3; Plateau; Poast; Poast Plus; Princep 4L; Ronstar 50 WSP; Ronstar Flo; Ronstar G; Sahara DG; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan Pro; Surflan XL 2G; Telar XP; Tordon K; Vanquish; Vastlan Specialty; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Weedar 64; 2,4-D; atrazine; bromacil; chlorsulfuron; cloyralid; dicamba; diuron; fosamine; hexazinone; imazapic; imazapyr; metsulfuron methyl; oryzalin; oxadiazon; pendimethalin; picloram; prodiamine; simazine; sulfometuron methyl; sulfosulfuron; triclopyr

10.9 Utility Management

This product may be used along electrical power, pipeline and telephone rights-of-way, and on all sites associated with these utility rights-of-way, including substations, access roads and railroads, and along similar rights-of-way that run in conjunction with utilities, for spot treatment of unwanted vegetation, side-trimming, trim-and-edge application around objects, weed control prior to planting a utility site to ornamentals, flowers or turfgrass (sod or seed), turf management, to eliminate unwanted weeds growing in established shrub or ornamental beds, to prepare or establishing wildlife openings and for eliminating vegetation prior to beginning construction projects. Application of this product may be repeated as needed to maintain bare ground as weeds continue to emerge, up to a maximum application rate of 8 quarts per acre per year.

TANK MIXTURES: This product may be tank-mixed with the following products for use on utility sites, provided that the product is labeled for use on these sites. Not all tank-mix products listed are labeled for aquatic use. Refer to the individual product label for approved uses and application rates. For control of herbaceous weeds, use a lower application rate or spray solution concentration within the given ranges for these tank-mix products and increase the rate or concentration toward the higher end of the ranges for control of dense stands or hard-to-control woody brush, trees and vines.

AAtrex 4L; AAtrex Nine-O; Arsenal Herbicide Applicators Concentrate; Endurance; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XLT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Hyvar XL; Krenite S Brush Control Agent; Krovar I DF; Oust Extra; Oust XP; Outrider®; Plateau; Sahara DG; Surflan AS Agricultural; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Telar XP; Transline Specialty; Vanquish; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Vastlan Specialty; Weedar 64; 2,4-D; atrazine; bromacil; chlorsulfuron; cloyralid; dicamba; diuron; fosamine; hexazinone; imazapic; imazapyr; metsulfuron methyl; oryzalin; pendimethalin; prodiamine; simazine; sulfometuron methyl; sulfosulfuron; triclopyr

Ensure that the Garlon product is thoroughly mixed with water according to label directions before adding this product to the spray mixture. Maintain continuous agitation when adding this product in order to avoid tank-mix compatibility problems.

For enhanced results with side-trimming, apply this product in a tank-mix with one of the Garlon products listed above.

11.0 CROP USES

11.1 Tree, Vine and Shrub Crops

THIS SECTION PROVIDES DIRECTIONS FOR USE THAT APPLY TO ALL TREE, VINE AND SHRUB CROPS LISTED IN THE FOLLOWING SECTIONS. SEE THE INDIVIDUAL CROP SECTIONS FOR SPECIFIC DIRECTIONS FOR USE, PREHARVEST INTERVALS, PRECAUTIONS AND RESTRICTIONS.

TYPES OF APPLICATION: Preplant (site preparation); Broadcast Spray, Selective Equipment (shielded sprayer, wiper applicator), Directed Spray and Spot Treatment in Middles (between rows of trees, vines or bushes) and Strips (within rows of trees, vines or bushes); Site Weed Control; Perennial Grass Suppression; Cut Stump Application

USE INSTRUCTIONS: Unless specifically prohibited in the individual crop sections that follow, this product may be applied using a boom sprayer, controlled droplet applicator (CDA), shielded sprayer, wiper applicator, handheld or backpack sprayer, lance or orchard gun, in middles (between rows of trees, vines or bushes) and strips (within rows of trees, vines or bushes), for weed control or perennial grass suppression in established tree fruit and nut groves, orchards and vineyards. It may also be used for site preparation prior to planting or transplanting these crops.

Apply 12 fluid ounces to 4 quarts of this product per acre as directed in the "WEEDS CONTROLLED" section of this label. Use a higher application rate within a given range when weeds are stressed, growing in dense populations or greater than 12 inches tall. Application may be repeated as needed up to a maximum of 8 quarts of this product per acre per year. See the "PRODUCT INFORMATION" section of this label for more information on Maximum Application Rates.

PRECAUTIONS: Use extreme care to avoid contact of this herbicide solution, spray, drift or mist with foliage or green bark of trunk, branches, suckers, fruit or other parts of desirable trees, canes and vines. Avoid application when recent pruning wounds or other mechanical injury have occurred. Contact of this product with other than matured brown bark could result in serious crop damage or destruction. Only shielded or directed sprayers may be used in crops where potential for crop contact is high, and then only where there is sufficient clearance. For application in strips (within rows of trees), only selective equipment (directed sprayer, hooded sprayer, shielded sprayer or wiper applicator) may be used in order to minimize the potential for overspray or drift of this product onto the crop. For berry crops, hooded sprayers must be fully enclosed including top, sides, front and back. Only wiper applicators or shielded sprayers capable of preventing all contact of this product with the crop may be used. See additional use instructions and precautions in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

RESTRICTIONS: Allow a minimum of 3 days between application of this product and transplanting.

Middles (between rows)

USE INSTRUCTIONS: This product will control or suppress annual and perennial weeds and ground covers growing between rows of tree, vine and shrub crops listed on this label. If weeds are under drought stress, irrigate prior to application. Reduced weed control could result if weeds have been recently mowed at the time of application.

TANK MIXTURES: A tank mixture of this product with Goal 2XL may be applied for annual weed control between rows (middles) of a variety of tree, vine and shrub crops when weeds are stressed or growing in dense populations. Application of 12 to 24 fluid ounces of this product per acre plus an appropriate rate of Goal 2XL will control annual weeds with a maximum height or length of 6 inches, including crabgrass, common groundsel, junglerice, common lambsquarters, redroot pigweed, London rocket, common ryegrass, shepherd's-purse, annual sowthistle, filaree (suppression), horseweed/marestail, stinging nettle and sulfosulfuron; triclopyr

common purslane (suppression). This tank-mix will also control common cheeseweed (malva) or hairy fleabane with a maximum height or length of 3 inches.

This product may also be applied to row middles in tank mixtures with the following products.

2,4-D; bromacil; clethodim; diuron; fluazifop-P-butyl; flumioxazin; glufosinate-ammonium; indaziflam; napropamide; norflurazon; oryzalin; oxyfluorfen; pendimethalin; penoxsulam; pyraflufen ethyl; rimsulfuron; saflufenacil; sethoxydim; simazine; thiazopyr

Alion; Chateau Herbicide SW; Devrinol 2-XT; Devrinol 50-DF; Devrinol 50-DF Ornamental; Devrinol DF-XT; Devrinol DF-XT Ornamental; Direx 4L; Dri-Clean; Fusilade II Turf & Ornamental; Fusilade DX; Goal 2XL; GoatTender; Karmex DF; Matrix FNV; Matrix SG; Orchard Master Broadleaf; Orchard Master CA; Pindar GT; Poast; Poast Plus; Prowl 3.3 EC; Prowl H2O; Princep 4L; Princep Caliber 90; Princep Liquid; Rely 280; Select; Select 2 EC; Select Max Herbicide with Inside Technology; Simazine 4L; Simazine 4L 10 Flowable; Simazine 90DF; Simazine 90 WDG; Sim-Trol 4L; Sim-Trol DF; Solicam DF; Surflan AS Agricultural; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Treewise Powered by Kixor; Venue; Visor Broadcrop

Ensure that the product used is labeled for application within the crop being grown. Read and follow label directions for all products in the tank mixture.

Strips (within rows)

TANK MIXTURES: This product may be applied within rows of tree, vine and shrub crops in tank mixtures with the following products.

2,4-D; bromacil; clethodim; diuron; fluazifop-P-butyl; flumioxazin; glufosinate-ammonium; indaziflam; napropamide; norflurazon; oryzalin; oxyfluorfen; pendimethalin; penoxsulam; pyraflufen ethyl; rimsulfuron; saflufenacil; sethoxydim; simazine; thiazopyr

Alion; Chateau Herbicide SW; Devrinol 2-XT; Devrinol 50-DF; Devrinol 50-DF Ornamental; Devrinol DF-XT; Devrinol DF-XT Ornamental; Direx 4L; Dri-Clean; Fusilade II Turf & Ornamental; Fusilade DX; Goal 2XL; GoatTender; Karmex DF; Matrix FNV; Matrix SG; Orchard Master Broadleaf; Orchard Master CA; Pindar GT; Poast; Poast Plus; Prowl 3.3 EC; Prowl H2O; Princep 4L; Princep Caliber 90; Princep Liquid; Rely 280; Select; Select 2 EC; Select Max Herbicide with Inside Technology; Simazine 4L; Simazine 4L 10 Flowable; Simazine 90DF; Simazine 90 WDG; Sim-Trol 4L; Sim-Trol DF; Solicam DF; Surflan AS Agricultural; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Treewise Powered by Kixor; Venue; Visor Broadcrop

Ensure that the product used is labeled for application within the crop being grown. Read and follow label directions for all products in the tank mixture.

RESTRICTIONS: Do not apply these tank mixtures in Puerto Rico.

Perennial Grass Suppression

This product will suppress perennial grasses such as bahiagrass, bermudagrass, tall fescue, orchardgrass, Kentucky bluegrass and quackgrass that are grown as ground covers in tree, vine and shrub crops.

For suppression of tall fescue, fine fescue, orchardgrass and quackgrass, apply 6 fluid ounces of this product in 10 to 20 gallons of water per acre.

For suppression of Kentucky bluegrass covers, apply 4.5 fluid ounces of this product per acre. Do not add ammonium sulfate to the spray mix.

For enhanced results, mow cool-season grass covers in the spring to even their height and then apply this product 3 to 4 days after mowing.

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 4.5 fluid ounces of this product in 10 to 25 gallons of water per acre 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches prior to seedhead emergence. For suppression for up to 120 days, apply 3 fluid ounces of this product per acre, followed by an application of 1.5 to 3 fluid ounces per acre about 45 days later. Make no more than two applications per year.

For burndown of bermudagrass, apply 24 to 48 fluid ounces of this product in 3 to 20 gallons of water per acre. Make this application only if a reduction of the bermudagrass stand can be tolerated. When burndown is required prior to harvest, make the application a minimum of 21 days prior to harvest to allow sufficient time for burndown to occur.

For suppression of bermudagrass, apply 4.5 to 12 fluid ounces of this product per acre east of the Rocky Mountains and 12 fluid ounces west of the Rocky Mountains in a total spray volume of 3 to 20 gallons per acre no sooner than 1 to 2 weeks after full green-up. If the bermudagrass is mowed prior to application, maintain a minimum of 3 inches in height. Sequential applications may be made when re-growth occurs and bermudagrass injury and stand reduction can be tolerated. East of the Rocky Mountains, apply 4.5 to 7.5 fluid ounces of this product per acre under shaded conditions or where a lesser degree of suppression is desired.

Cut Stump Application

Application of this product to a freshly cut tree stump may be made during site preparation or site renovation to control regrowth and re-sprouting of stumps of many tree species, some of which are listed below.

Citrus Trees: Calamondin, Chironja, Citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (Tangerine), Orange (all), Pummelo, Tangelo, Tangor

Fruit Trees: Apple, Apricot, Cherry (sweet, sour), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (all), Quince

Nut Trees: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia, Pecan, Pistachio, Walnut (black, English)

USE INSTRUCTIONS: Cut the tree close to the soil surface and immediately apply a 50- to 100-percent (undiluted) solution of this product to the freshly cut surface using application equipment capable of covering the entire cambium. A delay in application could result in reduced performance. For enhanced results, cut the tree during period of active growth and full leaf expansion and apply this product.

PRECAUTIONS: DO NOT MAKE A CUT STUMP APPLICATION WHEN THE ROOTS OF ADJACENT DESIRABLE TREES MIGHT BE GRAFTED TO THE ROOTS OF THE CUT STUMP, AS INJURY COULD OCCUR IN ADJACENT TREES. Some sprouts, stems or trees can share a common root system. Adjacent trees having a similar age, height and spacing could be an indicator of a shared root system. Whether grafted or shared, injury is likely to occur to adjacent stems or trees when this product is applied to one or more trees sharing a common root system.

11.1.1 Citrus Fruit Crops

LABELED CROPS: All cultivars, varieties and/or hybrids of Calamondin; Chironja; Citron; Citrus Hybrids; Grapefruit (including Japanese summer); Kumquat; Lemon; Lime (including Australian desert lime, Australian finger lime, Australian round lime, Brown river finger lime, Mount white, New Guinea wild, Russell river, sweet, and Tahiti); Mandarin (including Mediterranean, Satsuma); Orange (all); Pummelo; Tangelo (ugli); Tangerine (Mandarin); Tangor; Uniq Fruit (ugli)

TYPES OF APPLICATION: Preplant (site preparation); Broadcast Spray, Selective Equipment (shielded sprayer, wiper applicator), Directed Spray or Spot Treatment in Middles (between rows of trees) or Strips (within rows of trees); Perennial Grass Suppression; Cut Stump Application

USE INSTRUCTIONS: The following use instructions pertain to application in Florida and Texas only.

For burndown or control of the weeds listed below, apply this product at the specified rate in 3 to 30 gallons of water per acre. Where weed foliage is dense, use 10 to 30 gallons of water per acre.

To control goatweed, apply 48 to 72 fluid ounces of this product in 20 to 30 gallons of water per acre when plants are actively growing. Apply 48 fluid ounces per acre when plants are less than 8 inches tall and 72 fluid ounces per acre when plants are greater than 8 inches tall. If goatweed is greater than 8 inches tall, the use of this product in a tank-mix with Krovar I or Karmex could improve weed control. Refer to the individual product labels for specific crops, rates, geographic restrictions and precautionary statements.

Weed Species	Level of Perennial Weed Control at Various Application Rates (amount of this product per acre)			
	24 fl oz	48 fl oz	2.25 quarts	3.75 quarts
Bermudagrass	B	—	PC	C
Guinea grass	—	—	—	—
<i>Texas and Florida Ridge</i>	B	C	C	C
<i>Florida Flatwoods</i>	—	B	C	C
Para grass	B	C	C	C
Torpedograss	S	—	PC	C

S = Suppression, PC = Partial Control, B = Burndown, C = Control

RESTRICTIONS: Allow a minimum of 1 day between application and harvest of citrus fruit crops. For citron groves, apply as a directed spray only.

11.2 Annual and Perennial Crops

THIS SECTION PROVIDES DIRECTIONS FOR USE OF THIS PRODUCT THAT APPLY TO ALL CROPS LISTED IN THE FOLLOWING SECTIONS. SEE THE INDIVIDUAL CROP SECTIONS FOR SPECIFIC USE INSTRUCTIONS, PREHARVEST INTERVALS, AND ADDITIONAL PRECAUTIONS AND RESTRICTIONS.

TYPES OF APPLICATION: Chemical Fallow; Preplant Fallow Beds; Preplant; At-Planting; Preemergence; Hooded Sprayer in Row Middles; Shielded Sprayer in Row Middles; Wiper Applicator in Row Middles; Post-Harvest

USE INSTRUCTIONS: This product may be applied during fallow intervals preceding planting, prior to planting or transplanting, at-planting, or preemergence to annual and perennial crops listed on this label, except where specifically limited. For any crop not listed on this label, application must be made a minimum of 30 days prior to planting. Unless otherwise directed, apply this product according to the rates listed in the "WEEDS CONTROLLED" section of this label. Application rates specified on this label for hard-to-control weeds, or those specified on separate supplemental labeling for this product, supersede the rates in the "WEEDS CONTROLLED" section of this label. Additional information on hard-to-control weeds can be found on Fact Sheets published for this product.

Application of this product may be repeated as needed up to a maximum of 6 quarts per acre per year. Refer to specific use sections of this label for additional information on minimum intervals required before re-application of this product.

Hooded sprayers and wiper applicators capable of preventing all contact of the herbicide solution with the crop may be used in mulched or unmulched row middles after crop establishment. Wiper applicators may be used over the top of crops to control tall weeds only when specifically directed in the individual crop sections that follow. Crop injury is possible with these methods of application. Refer to the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information regarding the potential for crop injury using selective application equipment.

Spot treatment application of this product for weed control in a cropping system may be made only when specifically directed in the individual crop sections that follow.

Unless otherwise prohibited, all applications of this product described in the sections that follow may be made using aerial application equipment where appropriate, provided that the applicator complies with the precautions and restrictions specified on this label and on all supplemental labeling published for this product. Refer to the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for information on aerial application and procedures for avoiding spray drift that could cause injury to any vegetation not intended for application. Use of appropriate buffers will help prevent injury to adjacent vegetation.

TANK MIXTURES: This product may be tank-mixed with other herbicides to provide residual weed control, a broader weed control spectrum or an alternate mechanism of action. Always read and follow label directions for all products in the tank mixture. Use all products according to rates and timing specified on the label. Some tank-mix products have the potential to cause crop injury. Read the label for all products in the tank mixture prior to use to determine the potential for crop injury. Always predetermine the compatibility of tank-mix products together in the carrier by mixing small proportional quantities in advance. Mixing other products with this herbicide in the spray tank can cause incompatibility, antagonism, or a reduction in the efficacy of this product. Monsanto Company has not tested all product formulations for compatibility or performance in a tank-mix with this product. To the extent consistent with applicable law, buyer and all users are responsible for any and all loss or damage in connection with the use or handling of mixtures of this product with herbicides or other materials that are not specifically identified on this label or on separate supplemental labeling or Fact Sheets for this product. See the "MIXING" section of this label for more information on tank mixtures.

PRECAUTIONS: Avoid contact of this herbicide with foliage, green shoots or stems, bark, exposed roots (including those emerging from plastic mulch), or fruit of crops, as severe crop injury or destruction could result. Transplant seedlings coming into contact with weeds that are still wet with a spray solution of this product could result in significant crop injury. When making preemergence applications, application must be made before crop emergence to avoid severe crop injury. Broadcast application of this product at emergence will result in injury or death of emerged seedlings. Apply before seed germination in coarse sandy soils to further minimize the risk of crop injury. In crops where spot treatment is allowed, the crop sprayed with this product will be killed along with the weeds. Take care not to spray or allow spray to drift outside the target area in order to avoid unwanted crop destruction. See the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label for additional information.

Preharvest application on crops grown for seed could result in a reduction in germination or vigor. To the extent consistent with applicable law, buyer and all users are responsible for any and all loss or damage in connection with the preharvest use of this product on any crop grown for seed.

RESTRICTIONS: Observe the maximum application rates stated throughout this label. Maximum application rates apply to the use of this product combined with the use of any and all other herbicides containing glyphosate as the active ingredient, whether applied separately or as mixtures. Calculate the application rates (glyphosate acid equivalents) and ensure that the total use of this and other glyphosate-containing products does not exceed the stated maximum rate. See the "PRODUCT INFORMATION" section of this label for more information on Maximum Application Rates.

Unless otherwise directed on this label, application using selective equipment, including wiper applicators and hooded sprayers, must be made a minimum of 14 days prior to harvest. In crops where spot treatment is allowed, do not apply this product to more than 10 percent of the total field to be harvested, unless otherwise directed. Post-harvest and fallow application must be made a minimum of 30 days prior to the planting of any crop not listed on this label.

Do not harvest or feed vegetation from an area for 8 weeks following broadcast postemergence application, unless otherwise directed.

When applying this product as a tank mixture with one or more products, refer to each individual tank-mix product label for restrictions and apply the mixture in accordance with the most restrictive statements for each product in the tank.

11.2.1 Sugarcane

TYPES OF APPLICATION: Chemical Fallow; Preplant; At-Planting; Preemergence; Hooded Sprayer in Row Middles; Shielded Sprayer in Row Middles; Wiper Applicator in Row Middles; Spot Treatment; Plant Growth Regulator; Post-Harvest

Preplant, At-Planting, Preemergence

USE INSTRUCTIONS: This product may be applied in or around sugarcane fields, or in fields prior to the emergence of plant cane.

RESTRICTIONS: Do not apply to vegetation in or around ditches, canals or ponds containing water to be used for irrigation unless the surfactant added to the spray solution is labeled for herbicide use and approved for aquatic application.

Spot Treatment

USE INSTRUCTIONS: This product may be applied as a spot treatment in sugarcane. For control of volunteer or diseased sugarcane, apply a 1-percent solution of this product in water using a handheld sprayer and a spray-to-wet technique. Enhanced results can be obtained on volunteer or diseased sugarcane when application is made when there are at least 7 new leaves. Avoid contact of this herbicide with healthy sugarcane plants as severe damage or destruction could result.

RESTRICTIONS: Do not feed or graze treated sugarcane foliage within the application area.

Hooded Sprayer

USE INSTRUCTIONS: This product may be applied using a hooded sprayer for weed control in between rows of sugarcane. See additional instructions on the use of hooded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

PRECAUTIONS: Do not allow weeds within the application area to come into contact with the crop.

Plant Growth Regulation

USE INSTRUCTIONS: This product may be used as a foliar-applied plant growth regulator to hasten ripening and extend the period of high sucrose level in both low- and high-tonnage sugarcane. Most of the sucrose increase is concentrated in the top nodes of the cane stalk. To maximize sugar recovery where topping is practiced at harvest, top at the base of the fourth leaf. Consult your state sugarcane authority or local Monsanto Company representative regarding the degree of sucrose response that can be anticipated prior to application of this product.

As a result of leaf desiccation, improved trash burn can be expected.

Apply this product at the following rates and timing according to the State in which the sugarcane is grown. Use a higher application rate within the given range when applying to sugarcane under adverse ripening conditions or to less responsive varieties.

FLORIDA – Apply 6 to 14 fluid ounces of this product per acre 3 to 5 weeks before harvest of LAST RATOON CANE ONLY.

HAWAII – Apply 10 to 24 fluid ounces of this product per acre 4 to 10 weeks before harvest.

LOUISIANA – Apply 4 to 14 fluid ounces of this product per acre 3 to 7 weeks before harvest of RATOON CANE ONLY.

PUERTO RICO – Apply 6 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.

TEXAS – Apply 6 to 14 fluid ounces of this product per acre 3 to 5 weeks before harvest of RATOON CANE ONLY.

PRECAUTIONS: Application of this product can initiate development of shooting eyes. This product might not increase the sucrose content of sugarcane under conditions of good natural ripening. Within 2 to 3 weeks after

application, this product could produce a slight yellowing to a pronounced browning and drying of leaves, and a shortening of upper internodes. Spindle death could occur.

Rainfall within 6 hours after application could reduce the effectiveness of this product.

Application to sugarcane grown for seed could result in a reduction in germination or vigor. To the extent consistent with applicable law, buyer and all users are responsible for any and all loss or damage in connection with the preharvest use of this product on sugarcane grown for seed.

RESTRICTIONS: Do not feed or graze sugarcane forage following application. Do not plant subsequent crops within 30 days after application of this product other than the following: alfalfa or other forage legumes, beans (all types), corn (all types), cotton, melons (all types), pasture grasses, peanuts, potatoes (Irish or sweet), sorghum (milo), soybean, squash (all types) or wheat.

Do not apply for enhanced ripening to any crops other than sugarcane. Use of this product in any manner not consistent with this label could result in injury to persons, animals or crops, or other unintended consequences.

Fallow Treatment

USE INSTRUCTIONS: This product may be used as a replacement for tillage in fields that are lying fallow between sugarcane crops. This product may also be used to remove the last stubble of ratoon cane by applying 3 to 3.75 quarts of this product in 10 to 40 gallons of water per acre to new growth having at least 7 new leaves. Allow a minimum of 7 days after application before tillage. Aerial application of up to 72 fluid ounces per acre may be made onto fallow sites where there is sufficient buffer to prevent drift onto adjacent crops. Tank mixtures with 2,4-D or dicamba may be used. Ensure that the product used is labeled for this application in sugarcane. Read and follow label directions for all products in the tank mixture.

11.3 Grass Seed and Sod Production

USE INSTRUCTIONS: Refer to the "WEEDS CONTROLLED" section of this label for application rates of this product for specific weeds. When applied as directed, this product will control those annual and perennial grasses and broadleaf weeds listed. Application rates specified on this label for hard-to-control weeds, or those specified on separate supplemental labeling for this product, supersede rates listed in the "WEEDS CONTROLLED" section of this label. Additional information on hard-to-control weeds can be found on Fact Sheets published for this product.

LABELED CROPS: Any grass (*Gramineae* family) except Corn; Sorghum; Sugarcane; Barley; Buckwheat; Millet (pearl, proso); Oats; Rice; Rye; Quinoa; Teff; Teosinte; Triticale; Wheat (all types); Wild rice

TYPES OF APPLICATION: Preplant; At-Planting; Preemergence; Renovation; Removal of Established Stands; Site Preparation; Shielded Sprayer; Wiper Application; Spot Treatment; Creating Rows in Annual Ryegrass

Preplant, At-Planting, Preemergence, Renovation, Removal of Established Stand, Site Preparation

USE INSTRUCTIONS: This product controls most existing vegetation for purposes of renovating turf or forage grass seed production areas, or for establishing turfgrass grown for sod. This product may be used to destroy undesirable grass vegetation when production fields are converted to alternative species or crops. Do not disturb soil or underground plant parts before application and delay tillage or renovation techniques, including vertical mowing, coring and slicing, for a minimum of 7 days after application to allow for herbicide translocation into underground plant parts.

Apply before, during or after planting, or for renovation purposes. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the herbicide spray. For maximum control of existing vegetation, delay planting until determining if any re-growth of underground plant parts will occur. Where repeat applications are necessary, sufficient re-growth must be attained prior to application. For warm-season grasses, such as bermudagrass, summer or fall application provides enhanced control. Broadcast application of this product may be used to control sod remnants or other unwanted vegetation after sod is harvested. Application rates of up to 3.75 quarts per acre may be used to totally remove an established stand of hard-to-kill grass species.

RESTRICTIONS: If application rate is 2.25 quarts of this product per acre or less, no waiting period between application and feeding or livestock grazing is required. If the rate is greater than 2.25 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting. Crops listed on this label may be planted into the area at any time; all other crops may be planted 30 days after application.

Shielded Sprayer

USE INSTRUCTIONS: Apply 24 to 72 fluid ounces of this product in 10 to 20 gallons of water per acre using a shielded sprayer to control weeds between grass seed rows. Uniform planting in straight rows will aid shielded sprayer application. Enhanced results can be obtained when the grass seed crop is small enough to easily pass by the protective shields. See additional instructions on the use of shielded sprayers in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

PRECAUTIONS: Contact of this product in any manner to any vegetation to which application is not intended could cause damage.

Wiper Applicator

USE INSTRUCTIONS: This product may be applied over the top of desirable grasses using a wiper applicator for the control of tall weeds. See additional instructions on the use of wiper applicators in the "APPLICATION EQUIPMENT AND TECHNIQUES" section of this label.

PRECAUTIONS: Droplets, mist, foam or splatter of the herbicide solution settling onto desirable vegetation could result in discoloration, stunting or destruction.

Spot Treatment

USE INSTRUCTIONS: Apply a 1-percent solution of this product using a handheld sprayer to control weeds within established vegetation prior to heading of grasses grown for seed or to control sod remnants or other unwanted vegetation after sod is harvested.

PRECAUTIONS: This product will kill the desirable grasses along with the weeds. Take care not to spray or allow spray to drift outside the target area in order to avoid unwanted crop destruction.

Creating Rows in Annual Ryegrass

USE INSTRUCTIONS: Use low-pressure nozzles or drop nozzles designed to target the application over a narrow band. Set nozzle height to establish the desired row spacing and apply 12 to 24 fluid ounces of this

product per acre. Enhanced results can be obtained when application is made before ryegrass reaches 6 inches in height. Use the higher application rate within this range when ryegrass is greater than 6 inches in height.

PRECAUTIONS: Take care not to spray or allow spray to drift outside target area in order to avoid unwanted crop destruction. To the extent consistent with applicable law, grower assumes all responsibility for crop losses resulting from misapplication of this product.

12.0 WEEDS CONTROLLED

Read the entire label before proceeding to use this product.

Unless otherwise directed, this product requires the addition of a nonionic surfactant that is labeled for use with herbicides to the spray solution. See the "MIXING" section of this label for more information on the use of surfactants with this product.

Always use the higher application rate or spray solution concentration of this product within a given range when weed growth is heavy or dense, or when weeds are growing in an undisturbed (non-cultivated) area. Poor weed control could be realized if application is made to weeds covered with dust. For weeds that have been mowed, grazed or cut, allow re-growth to occur prior to application of this product.

Refer to the sections that follow for application rates and timing of application for the control of annual and perennial weeds and woody brush, trees and vines.

12.1 Weed Control, Renovation and Chemical Mowing in Turf

The use of this product described in this section may be applied to turfgrass growing on any terrestrial site listed on this label. Ensure that any tank-mix product applied with this product is labeled for the intended use and on the site of application.

Weed Control in Dormant Bermudagrass and Bahiagrass

This product may be used to control or suppress many winter annual weeds and tall fescue for effective release of dormant bermudagrass and bahiagrass prior to spring green-up in areas where these turfgrasses are desirable ground covers and some temporary injury or discoloration can be tolerated.

Apply 6 to 48 fluid ounces of this product in 10 to 40 gallons of water per acre when bermudagrass and bahiagrass are dormant and prior to spring green-up.

Application of more than 12 fluid ounces of this product per acre on highly maintained bermudagrass and bahiagrass turf, such as golf courses and lawns, could result in injury or delayed green-up in the spring.

For residual weed control in dormant bermudagrass and bahiagrass, this product may be tank-mixed with Outrider®, Oust Extra or Oust XP herbicides. Apply 6 to 48 fluid ounces of this product in a tank-mix with an appropriate rate of Outrider, Oust Extra or Oust XP herbicide in 10 to 40 gallons of water per acre. To avoid delays in green-up and minimize injury, apply no more than 1 ounce of Oust Extra or Oust XP herbicide per acre on bermudagrass and no more than 0.5 ounce on bahiagrass, and avoid application when these grasses are in a semi-dormant condition.

DO NOT apply this product in a tank-mix with Outrider, Oust Extra or Oust XP herbicides on highly maintained bermudagrass and bahiagrass turf, such as on golf courses and lawns.

Weed Control in Actively Growing Bermudagrass

This product may be used to control or partially control many annual and perennial weeds in actively growing bermudagrass. Some bermudagrass injury could result from the application of this product, but the bermudagrass will recover under moist conditions once the effects of the product wear off. Use only on well-established bermudagrass where some temporary injury or discoloration can be tolerated.

Apply 12 to 36 fluid ounces of this product in 10 to 40 gallons of spray solution per acre. Use a lower application rate within this range when controlling annual weeds less than 4 inches tall (or runner length) and increase the rate towards the upper end of the range as weeds increase in size or as they approach flower or seedhead formation. At these application rates, this product will provide partial control of the following perennial weeds in actively growing bermudagrass:

- Bahiagrass
- Bluestem, silver
- Fescue, tall
- Johnsongrass
- Trumpetcreeper
- Vaseygrass

PRECAUTIONS: Applying more than 12 fluid ounces of this product per acre on highly maintained bermudagrass, such as on golf courses and lawns, could cause unacceptable turf injury and discoloration.

For a broader weed control spectrum in actively growing bermudagrass, this product may be tank-mixed with Outrider, Oust Extra or Oust XP herbicides. Apply these tank-mixtures only on well-established bermudagrass where some temporary injury or discoloration can be tolerated. Make no more than one application of this product in these tank mixtures in the same season, otherwise the bermudagrass could be severely injured.

Apply 6 to 24 fluid ounces of this product per acre in a tank-mix with Outrider herbicide for control or partial control of Johnsongrass and other weeds listed on the Outrider herbicide label. Use a higher application rate of both products within the given ranges for control of annual or perennial weeds greater than 6 inches tall.

Apply 12 to 24 fluid ounces of this product per acre in a tank-mix with Oust Extra or Oust XP herbicide per acre for enhanced control of weeds listed on those labels. Use a lower application rate of each product within the given ranges to control annual weeds listed on the labels that are less than 4 inches tall (or runner length) and increase the rates toward the upper end of the ranges as annual weeds increase in size and approach the flower or seedhead stage. This tank-mix will provide partial control of the following perennial weeds in actively growing bermudagrass:

- Bahiagrass
- Bluestem, silver
- Broomsedge
- Dallisgrass
- Dock, curly
- Dogfennel
- Fescue, tall
- Johnsongrass
- Poorjoe
- Trumpetcreeper
- Vaseygrass
- Vervain, blue

PRECAUTIONS: Apply these tank mixtures only on well-established bermudagrass where some temporary injury or discoloration can be tolerated. DO NOT apply this product in a tank mixture with Outrider or Oust herbicides on highly maintained bermudagrass, such as on golf courses and lawns.

Weed Control in Actively Growing Bahiagrass

For suppression of vegetative growth and seedhead inhibition of bahiagrass for approximately 45 days, apply 4 fluid ounces of this product in 10 to 40 gallons of water per acre 1 to 2 weeks after full green-up or after mowing to a uniform height of 3 to 4 inches prior to seedhead emergence.

For growth suppression of bahiagrass for up to 120 days, apply 3 fluid ounces of this product per acre, followed by an application of 2 to 3 fluid ounces per acre about 45 days later. Make no more than two growth suppression applications per year.

For broad spectrum weed control in actively growing bahiagrass, this product may be tank-mixed with Outrider®, Oust Extra or Oust XP herbicides.

Apply 1.5 to 3.5 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Outrider herbicide per acre to control perennial weeds or annual weeds greater than 4 inches in height.

Apply 4 fluid ounces of this product per acre in a tank-mix with an appropriate rate of Oust Extra or Oust XP herbicide 1 to 2 weeks following an initial spring mowing for enhanced control of weeds listed on the Oust herbicide label in actively growing bahiagrass. Make this application only once per year.

PRECAUTIONS: Apply these tank mixtures only on well-established bahiagrass where some temporary injury or discoloration can be tolerated.

Turf Renovation

This product controls most existing vegetation prior to renovating turfgrass areas or establishing turfgrass grown for seed or sod. For maximum control of existing vegetation, delay planting or sodding until after determining if any re-growth of underground plant parts will occur. Where repeat applications are necessary, sufficient re-growth must be attained prior to re-application of this product. Summer or fall application provides enhanced control of warm-season grasses, such as bermudagrass. For managed turfgrass, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray solution.

This product has no residual soil activity and will not affect plants, seed or sod planted back into the area after application.

A handheld sprayer may be used for spot treatment of unwanted vegetation growing in existing turfgrass. Broadcast application or spot treatment using a handheld sprayer may be used to control sod remnants or other unwanted vegetation after sod is harvested.

PRECAUTIONS: Do not disturb soil or underground plant parts before application of this product. Delay tillage and renovation techniques, such as vertical mowing, coring or slicing, a minimum of 7 days after application to allow translocation of this herbicide into underground plant parts.

RESTRICTIONS: If application rates total 2.25 quarts of this product per acre or less, no waiting period between application and feeding or livestock grazing is required. If the rate is greater than 2.25 quarts per acre, remove domestic livestock before application and wait 8 weeks after application before grazing or harvesting.

Chemical Mowing

This product may be used to suppress growth of perennial and annual grasses to serve as a substitute for mowing.

Perennial Grasses—apply 5 fluid ounces of this product per acre to suppress growth of Kentucky bluegrass, or 6 fluid ounces to suppress tall fescue, fine fescue, orchardgrass, quackgrass or reed canarygrass in 10 to 40 gallons of spray solution per acre after grasses have greened up to at least 75 percent green color in the spring, or 7 to 10 days after mowing when sufficient re-growth has occurred to provide a desirable height for growth regulation. Use chemical mowing only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

Annual Grasses—apply 3 to 4 fluid ounces of this product in 10 to 40 gallons of spray solution per acre to suppress growth of some annual grasses, such as annual ryegrass, wild barley and wild oats when actively growing in coarse turf on roadsides or other industrial areas and before the seedheads are in the boot stage of development. This application could injure the desired annual grasses.

PRECAUTIONS: Use this product for chemical mowing only in areas where some temporary injury or discoloration of perennial and annual grasses can be tolerated.

12.2 Annual Weeds

Annual weeds are easiest to control when they are small and actively growing. New leaf development indicates active growth.

To control or partially control the annual weeds listed in this section when they are less than 6 inches in height or runner length and actively growing, apply 24 fluid ounces of this product per acre. If they are over 6 inches in height or runner length, or slowly growing under stressed conditions, increase the application rate to 1 to 4 quarts per acre, depending on weed height and the severity of the poor growing conditions.

For application using a handheld sprayer with a spray-to-wet technique, apply a 0.5-percent solution of this product to annual weeds less than 6 inches in height or runner length prior to seedhead formation in grasses or bud formation in broadleaf weeds. To control annual weeds over 6 inches tall, or even smaller weeds growing under stressed conditions, apply a 0.75 to 1.5-percent solution. Apply the maximum concentration of this product within this range for hard-to-control weeds or to control weeds over 24 inches tall.

For control of annual weeds using a handheld controlled droplet applicator (CDA), apply a 15-percent solution of this product (19 to 20 fluid ounces of this product per gallon of spray solution) at a flow rate of 2 fluid ounces of spray solution per minute and a walking speed of 1.5 miles per hour (1 quart of spray solution per acre). When using a vehicle-mounted CDA, apply the required amount of this product, as indicated in this section, in 2 to 15 gallons of water per acre.

For enhanced control, do not mow, cut, till, burn or disturb vegetation in the application area for a minimum of 3 days after application.

This product has no residual soil activity and does not control emergence of new annual weeds from seed. Subsequent applications of this product will be needed to control weeds that continue to emerge.

WEED SPECIES

Anoda, spurred	Medusahead
Balsam apple ¹	Morning glory (<i>Ipomoea spp</i>)
Barley	Mustard, blue
Barley, little	Mustard, tansy
Barnyardgrass	Mustard, tumble
Bassia, fivehook	Mustard, wild
Bittercress	Nightshade, black
Bluegrass, annual	Oats
Bluegrass, bulbous	Panicum, browntop
Brome, downy	Panicum, fall
Brome, Japanese	Panicum, Texas
Broomesedge	Pennycress, field
Buttercup	Pepperweed, Virginia
Castor bean ²	Pigweed
Cheatgrass	Puncturevine
Cheeseweed (<i>Malva parviflora</i>)	Purslane, common
Chervil	Pusley, Florida
Chickweed	Ragweed, common
Cocklebur	Ragweed, giant
Copperleaf, hophornbeam	Rice, red
Copperleaf, Virginia	Rocket, London
Coreopsis, plains/tickseed	Rocket, yellow
Corn	Rye
Crabgrass	Ryegrass
Cupgrass, woolly	Sandbur, field
Dwarf dandelion	Sesbania, hemp
Eclipta	Shattercane
False dandelion	Shepherd's-purse
False flax, small-seed	Sicklepod
Fiddleneck	Signalgrass, broadleaf
Filarree	Smartweed, lady's-thumb
Fleabane, annual	Smartweed, Pennsylvania
Fleabane, hairy (<i>Conyza bonariensis</i>)	Sorghum, grain (milo)
Fleabane, rough	Sowthistle, annual
Foxtail	Spanish needles ³
Foxtail, Carolina	Speedwell, corn
Geranium, Carolina	Speedwell, purslane
Goatgrass, jointed	Sprangletop
Goosegrass	Spurge, annual
Groundsel, common	Spurge, prostrate
Henbit	Spurge, spotted
Horseweed/Marestail (<i>Conyza canadensis</i>)	Spurry, umbrella
Itchgrass	Starthistle, yellow
Johnsongrass, seedling	Stinkgrass
Junglerice	Sunflower
Knotweed	Teaweed / Prickly sida
Kochia	Thistle, Russian
Lambsquarters	Velvetleaf
Lettuce, prickly	Wheat
Mannagrass, eastern	Wild oats
Mayweed	Witchgrass

1 For control of balsam apple, apply this product using handheld equipment only.

2 Control of castor bean can also be achieved by injecting 4 milliliters of this concentrated (undiluted) product per plant into the lower portion of the main stem.

3 For control of Spanish needles, apply 48 fluid ounces of this product per acre.

12.3 Perennial Weeds

Enhanced control of perennial weeds can be obtained when this product is applied when target weeds are small and actively growing. New leaf development indicates active growth. If application of this product must be made to larger weeds or to weeds that are slowly growing under stressful conditions, apply at a rate or spray solution concentration towards the upper end of the specified range.

If weeds have been mowed or tilled, do not apply this product until plants have resumed active growth and have reached the specified stage of growth or sufficient growth has been achieved to allow for good interception of the spray solution. For enhanced control, do not mow, cut, till, burn or disturb vegetation in the application area for a minimum of 7 days after application.

For control of perennial weeds listed on this label using backpack or handheld equipment and a low-volume application technique, apply a 4 to 8-percent solution of this product over the crown of the target plant to cover 50 percent of the upper plant foliage.

For control of perennial weeds using a handheld controlled droplet applicator (CDA), apply a 15 to 30-percent solution of this product (19 to 38 fluid ounces of this product per gallon of spray solution) at a flow rate of

2 fluid ounces of spray solution per minute and a walking speed of 0.75 mile per hour (2 to 4 quarts of spray solution per acre). When using a vehicle-mounted CDA, apply the required amount of this product, as indicated in the following table, in 2 to 15 gallons of water per acre.

Application of this product in the fall must be made before a killing frost.

This product has no soil activity and does not control emergence of perennial weeds from seed and dormant underground roots, rhizomes or tubers present in the soil at the time of application. More than one application of this product will be necessary for continued control of weeds that emerge following application.

PERENNIAL WEEDS RATE TABLE

Weed Species	Broadcast Rate (quarts/acre)	Handheld Spray-to-Wet Concentration (% solution)
Alfalfa*	0.7	1.5
Alligatorweed*	3	1.3
Apply this product when most of the target plants are in bloom. More than one application will be needed to achieve control.		
Anise (fennel)	1.5 – 3	1 – 1.5
Bahiagrass	2.3 – 3.75	1.5
Beachgrass, European	–	3.5
Apply a 3.5-percent solution of this product using a spray-to-wet technique or an 8-percent solution using a low-volume application technique. Enhanced results can be obtained when application is made onto target weeds that are actively growing at the boot through the full-heading stage of development. Make application prior to the loss of more than 50 percent of green leaf color in the fall. Monitor application site and re-apply this product to any target weeds that were missed, if necessary, before re-seeding the area with desirable vegetation. For selective control of European beachgrass, apply a 33.3-percent solution of this product containing 1 to 2.5 percent of a nonionic surfactant during period of active growth using a wiper applicator. Maximizing the amount of individual leaf tissue contacted by the wiper applicator or making a second pass in the opposite direction will improve control. Avoid contact of the herbicide solution with desirable vegetation.		
Bentgrass*	1	1.5
Bermudagrass	4	1.5
Make application when seedheads are present.		
Bermudagrass, water (knotgrass)	1	1.5
Bindweed, field	2.3 – 3.75	1.5
For control, apply 3 to 3.75 quarts of this product per acre as a broadcast application west of the Mississippi River and 2.3 to 3 quarts per acre east of the Mississippi River when bindweed is at or beyond full bloom. For enhanced results, apply in late-summer or fall.		
Bittersweet, Oriental	2.25	2
For control of oriental bittersweet, apply this product as a broadcast spray in 30 to 40 gallons of spray solution containing 0.25 percent of a nonionic surfactant and 0.1 percent nonionic organosilicone per acre. Use a nonionic surfactant concentration of 0.5 to 2 percent by volume when using a handheld sprayer and a spray-to-wet application. For enhanced results, ensure complete coverage of the target plant with the spray solution.		
Bluegrass, Kentucky	1.5 – 2.3	0.75
Apply when most target plants have reached the boot to head stage of development. When application is made prior to the boot stage, reduced control can result. In the fall, make application before plants have turned brown.		
Blueweed, Texas	2.3 – 3.75	1.5
Apply 3 to 3.75 quarts of this product per acre west of the Mississippi River and 2.3 to 3 quarts per acre east of the Mississippi River when most target plants are at or beyond full bloom. For enhanced results, apply in late-summer or fall.		
Brackenfern	2.3 – 3	0.75 – 1
Apply to fully expanded fronds that are at least 18 inches long.		
Bromegrass, smooth	1.5 – 2.3	0.75
Apply this product when most target plants have reached the boot to head stage of development. When application is made prior to the boot stage, reduced control can result. In the fall, make application before plants have turned brown.		
Bursage, woolly-leaf	–	1.5
Canarygrass, reed	1.5 – 2.3	0.75
Apply this product when most target plants have reached the boot to head stage of development. When application is made prior to the boot stage, reduced control can result. In the fall, make application before plants have turned brown.		
Cattail	2.3 – 3.75	0.75
Apply this product when target plants are actively growing and are at or beyond the early to full bloom stage of development. Enhanced results are achieved when application is made during the summer or fall months.		
Clover; red, white	2.3 – 3.75	1.5
Cogongrass	2.3 – 3.75	1.5
Apply this product in late-summer or fall when cogongrass is at least 18 inches tall and actively growing. Due to uneven stages of growth and the dense nature of cogongrass vegetation, more than one application might be necessary to achieve control.		
Cordgrass	2 – 8	5 – 8
Prior to application of this product for control of cordgrass, survey the area to determine if shellfish beds exist within the application area. If shellfish are intended to be harvested in the area, delay application of this product until after harvest or maintain a 50-foot buffer between the application area and commercial shellfish beds, or do not harvest shellfish for a minimum of 14 days following application of this product. See restrictions below.		
Ideal conditions for control of cordgrass are when target plants are free of silt and debris and actively growing, and good spray coverage is achievable. The presence of debris or silt on the surface of cordgrass will reduce the performance of this product. To improve herbicide uptake, wash targeted plants prior to application and allow a minimum of 4 hours for plants to dry before applying this product. Where cordgrass has been cut or mowed prior to application, allow for sufficient re-growth before applying this product to ensure adequate interception and uptake of this product. Rainfall or immersion of the plant in tidewater within 4 hours after application could reduce the effectiveness of this product.		
Apply 2 to 8 quarts of this product per acre using ground broadcast application or optical sensor equipment in 5 to 100 gallons of spray solution, or in 5 to 10 gallons of spray solution per acre when using aerial application equipment.		
Apply a 5 to 8-percent solution of this product when using a handheld backpack sprayer or high-volume sprayer. Make all applications of this product for the control of cordgrass in a spray solution containing 0.25% or more (1 or more quarts per 100 gallons of spray solution) of a nonionic surfactant or other adjuvant that is compatible with this product and labeled for use with herbicides and approved for use on aquatic sites. For enhanced results, ensure complete coverage of cordgrass clumps.		
RESTRICTIONS: If a minimum 50-foot buffer is maintained between the application area and commercial shellfish beds, there is no restriction on shellfish harvest. If application is made within 50 feet of commercial shellfish beds, DO NOT harvest shellfish for a minimum of 14 days following application of this product.		
Cutgrass, giant*	3	1
More than one application of this product will be required to achieve control, especially where vegetation is partially submerged in water. Allow target weeds to re-grow to the 7 to 10-leaf stage before making next application.		
Dallisgrass	2.3 – 3.75	1.5
Dandelion	2.3 – 3.75	1.5

PERENNIAL WEEDS RATE TABLE

Weed Species	Broadcast Rate (quarts/acre)	Handheld Spray-to-Wet Concentration (% solution)
Dock, curly	2.3 – 3.75	1.5
Dogbane, hemp	3	1.5
Apply this product when most target plants have reached the late-bud to flower stage of growth. For enhanced results, make application in late-summer or fall.		
Fescue (except tall)	2.3 – 3.75	1.5
Fescue, tall	2.3	1
Apply this product when most target plants have reached the boot to head stage of growth. If applied prior to the boot stage, less than desirable control might be obtained.		
Guinea grass	2.3	0.75
Apply this product when most target plants have at least reached the 7-leaf growth stage.		
Hemlock, poison	1.5 – 3	0.75 – 1.5
Control can also be achieved by injecting 5 milliliters of a 5-percent solution of this product using a handheld injection device in one leaf cane per plant, 12 inches above the root crown. ¹ No surfactant is required.		
Hogweed, giant	–	–
Inject 5 milliliters of a 5-percent solution of this product into one leaf cane per plant, 12 inches above the root crown. ¹ No surfactant is required.		
Hornenettle	2.3 – 3.75	1.5
Horseradish	3	1.5
Apply this product when most target plants have reached the late-bud to flower stage of development. For enhanced results, apply in late summer or fall.		
Horsetail, field	–	–
Inject 0.5 milliliter of this product per stem directly into the plant stem, one segment above the root crown. ¹ No surfactant is required.		
Iceplant	1.5	1.5
Iris, yellow flag	–	–
Cut flower stems 8 to 9 inches above the root crown. Push a cavity needle into the stem center and then slowly remove it as you inject 0.5 milliliter of this product using a handheld injector. ¹ No surfactant is required.		
Ivy, cape, German	1.5 – 3	0.75 – 1.5
Jerusalem artichoke	2.3 – 3.75	1.5
Johnsongrass	1.5 – 2.3	0.75
Apply this product when most target plants have reached the boot to head stage of development or before plants have turned brown in the fall. When applied prior to the boot stage, reduced control can result.		
Kikuyu grass	1.5 – 2.3	0.75
Knapweed	3	1.5
Apply this product when most target plants have reached the late-bud to flower stage of growth. For enhanced results, apply in late-summer or fall.		
Knotweed; Bohemian, giant, Japanese	3	2
Apply 3 quarts of this product per acre as a broadcast application in 3 to 40 gallons of spray solution with 0.5 to 1 percent by volume of a nonionic surfactant. For application using a backpack sprayer and a spray-to-wet technique, apply a 2-percent solution of this product containing 0.5 to 2 percent by volume of a nonionic surfactant. For enhanced control, do not disturb vegetation in the application area for a minimum of 7 days after application.		
Control can also be achieved by cutting stems cleanly just below the 2nd or 3rd node above the ground and immediately apply 0.36 fluid ounce (10 milliliters) of a 50-percent solution of this product in water into the "well" or remaining internode. Ensure that the upper plant material that was removed is gathered and properly discarded to prevent new plants from propagating from sprouting buds. Use of a bio-barrier, such as cardboard, plywood or plastic sheeting, will help guard against the spread of plant material. The combined total application rate of this product must not exceed 8 quarts per acre. ¹ Control can also be achieved by injecting 5 milliliters of this product per stem into the second or third internode using a handheld injection device. ¹ No surfactant is required.		
Lantana	–	0.75 – 1
Apply this product when most target plants are at or beyond the bloom stage of growth. Use the higher spray solution concentration on plants that have reached the woody stage of growth.		
Lespedeza	2.3 – 3.75	1.5
Loosestrife, purple	2	1 – 1.5
Apply this product when most target plants are at or beyond the bloom stage of growth. Enhanced results can be achieved when application is made during summer or fall months. Fall application must be made before a killing frost.		
Lotus, American	2	0.75
Apply this product when most target plants are at or beyond the bloom stage of growth. Enhanced results can be achieved when application is made during summer or fall months. Fall application must be made before a killing frost. More than one application of this product might be necessary to control re-growth of underground plant parts and seeds.		
Maidencane	3	0.75
More than one application of this product will be needed for control, especially for vegetation partially submerged in water. Allow plants to re-grow to the 7 to 10-leaf stage before making next application.		
Milkweed, common	2.3	1.5
Apply this product when most target plants have reached the late-bud to flower stage of growth.		
Muhly, wirestem	1.5 – 2.3	0.75
Make application when most target plants are at least 8 inches in height (3 to 4-leaf stage of development) and actively growing.		
Mullein, common	2.3 – 3.75	1.5
Napiergrass	2.3 – 3.75	1.5
Nightshade, silverleaf	2.3 – 3.75	1.5
Apply 3 to 3.75 quarts of this product per acre as a broadcast application west of the Mississippi River and 2.3 to 3 quarts per acre east of the Mississippi River when most target plants are at or beyond full bloom. Enhanced results can be obtained when application is made in late-summer or fall after berries have formed.		
Nutsedge; purple, yellow	2.3	0.75
Apply this product to control existing nutsedge plants and attached immature nutlets when target plants are in flower or when new nutlets can be found at rhizome tips. Nutlets that have not germinated will not be controlled and will require repeated application of this product for long-term control.		
Orchardgrass	1.5 – 2.3	0.75
Make application when most target plants have reached the boot to head stage of development. When applied prior to the boot stage, less than desirable control could be obtained. In the fall, make application before plants have turned brown.		
Pampas grass	2.3 – 3.75	1.5
Para grass	3	0.75
More than one application of this product will be needed to achieve complete control. Allow plants to re-grow to the 7 to 10-leaf stage before making next application.		
Pepperweed, perennial	3	1.5
Phragmites*	2 – 3.75	0.75 – 1.5

PERENNIAL WEEDS RATE TABLE

Weed Species	Broadcast Rate (quarts/acre)	Handheld Spray-to-Wet Concentration (% solution)
For partial control of phragmites in Florida and the counties of other states bordering the Gulf of Mexico, apply 3.75 quarts of this product per acre as a broadcast application or a 1.5-percent solution using a handheld sprayer. In other areas of the U.S., apply 2 to 3 quarts per acre as a broadcast application or, for partial control, apply a 0.75-percent solution using a handheld sprayer. For enhanced results, make application in late-summer or fall when plants are actively growing and in full bloom. Due to the dense nature of this vegetation (which can prevent good spray coverage) and uneven stages of growth, more than one application of this product might be necessary to achieve control. Visual symptoms of control will be slow to develop.		
Quackgrass	1.5 – 2.3	0.75
Apply this product when most target plants are at least 8 inches in height (3 to 4-leaf stage of development) and actively growing.		
Redvine*	1.5	1.5
Reed; common, giant	3 – 3.75	1.5
For enhanced results make application in late-summer or fall. Control can also be achieved by injecting 5 milliliters of this concentrated product (undiluted) directly into the second or third internode using a handheld injection device. ¹ No surfactant is required.		
Ryegrass, perennial	1.5 – 2.3	0.75
Apply this product when most target plants have reached the boot to head stage of growth. When applied prior to the boot stage, reduced control can result. In the fall, make application before ryegrass turns brown.		
Salvinia, giant	3 – 3.75	2
Apply a 2-percent solution of this product containing 0.5 to 2 percent by volume of a nonionic surfactant approved for aquatic use and containing at least 70 percent active ingredient using spray-to-wet technique. For broadcast application, apply 3 to 3.75 quarts of this product per acre in 3 to 40 gallons of spray solution containing 0.1 percent by volume nonionic organosilicone and 0.25 percent nonionic spreader sticker surfactant approved for aquatic use. Allow a minimum of 3 days after application before disturbing vegetation in the application site. This product will not control plants that are completely submerged or have a majority of foliage under water.		
Smartweed, swamp	2.3 – 3.75	1.5
Spatterdock	3	0.75
Make application when most target plants are in full bloom. For enhanced results, apply in the summer or fall.		
Spurge, leafy*	–	1.5
Starthistle, yellow	–	1.5
Sweet potato, wild*	–	1.5
Make application when most target plants are at or beyond the bloom stage of growth. More than one application will be needed to achieve control.		
Thistle, artichoke	1.5 – 2.3	2
Make application when target plants are at or beyond the bud stage of growth.		
Thistle, Canada	1.5 – 2.3	1.5
Make application when target plants are at or beyond the bud stage of growth. Control can also be achieved by stem-injection. Cut 8 to 9 of tallest plants in a clump at bud stage. Push a cavity needle into the stem center and then slowly remove it as you inject 0.5 milliliter of this concentrated product into the stem. ¹ No surfactant required.		
Timothy	1.5 – 2.3	1.5
Make application when most target plants have reached the boot to head stage of development. If application is made prior to the boot stage, reduced control can result. In the fall, make application before plants turn brown.		
Torpedograss*	3 – 3.75	0.75 – 1.5
Apply this product at a lower rate or spray solution concentration within the specified range when torpedograss is growing on terrestrial sites and at a higher rate or concentration within the range when partially submerged under water or growing as a floating mat. Additional applications of this product will be needed to maintain control.		
Trumpetcreeper*	1.5 – 2.3	1.5
Tules, common	–	1.5
Make application to target plants at or beyond the seedhead stage of development. Visual symptoms will be slow to appear and might not appear for 3 or more weeks after application.		
Vaseygrass	2.3 – 3.75	1.5
Velvetgrass	2.3 – 3.75	1.5
Waterhyacinth	2.5 – 3	0.75 – 1
Make application when target plants are at or beyond the early bloom stage of development. Visual symptoms might require 3 or more weeks after application to appear, with complete necrosis and decomposition not occurring until 60 to 90 days after application. Use a higher application rate within the given range when more rapid visual effects are desired.		
Waterlettuce	–	0.75 – 1
Apply a 1-percent solution of this product in areas of heavy infestation. Enhanced results can be obtained when applied from mid-summer through winter. Application in the spring could require more than one application to achieve control.		
Waterprimrose	–	0.75
Make application to target plants that are at or beyond the bloom stage of growth, but before fall color changes occur. Thorough coverage is necessary for enhanced control.		
Wheatgrass, western	1.5 – 2.3	0.75
Make application when most target plants have reached the boot to head stage of development. Application made prior to the boot stage could result in reduced control. In the fall, make application before plants turn brown.		

* Partial control

1 When using stem injection, the combined total use of this product must not exceed 8 quarts per acre per year. At 5 milliliters of concentrated (undiluted) product per stem, 8 quarts will treat approximately 1500 stems per acre per year. The number of stems that can be treated per acre will vary depending on the injection volume and the concentration of this product in the application solution.

Other perennials listed on this label – Apply 2.3 to 3.75 quarts of this product per acre as a broadcast application or a 0.75 to 1.5-percent solution using a handheld sprayer.

12.4 Woody Brush, Trees and Vines

Apply this product to brush and trees that are actively growing after full leaf expansion, unless otherwise directed. Use a higher application rate within a given range for larger brush and trees and/or application in areas of dense vegetative growth. For control of vines, apply this product at a higher application rate or spray solution concentration within the given range when target plants have reached the woody stage of growth.

Enhanced control of woody brush and trees is obtained when application is made in late-summer or fall after fruit formation; however, in arid areas, enhanced control can be obtained when application

is made in the spring to early-summer when brush and trees are at high moisture content and flowering. Poor control can be expected when this product is applied to drought-stressed brush and trees.

Some autumn color on undesirable deciduous species is acceptable when applying this product to brush and trees in the fall, provided no major leaf drop has occurred. Reduced performance of this product could result if fall application is made following a frost. Symptoms might not appear prior to frost or senescence following fall application.

For enhanced results, allow 7 or more days after application before mowing, cutting, tilling, burning or removal of woody brush, trees and vines from the application site. Additional applications of this product will be needed to control brush and trees regenerating from underground parts or seed.

TANK MIXTURES: This product may be applied at any rate stated on this label in a tank mixture with the following products to increase the spectrum of control of herbaceous weeds, woody brush, trees and vines. For control of herbaceous weeds, apply the tank-mix product at the lower end of the given application rate or spray solution concentration range. For control of dense stands or tough-to-control woody brush, trees and vines, increase the application rate or spray solution concentration of the tank-mix product towards the higher end of the range. Refer to the individual product labels for approved uses and application rates. Not all tank-mix products listed are labeled for aquatic use.

Arsenal; Arsenal Herbicide Applicators Concentrate; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Vastlan Specialty; imazapyr; metsulfuron methyl; triclopyr

Ensure that the proper amount of the Garlon herbicide is thoroughly mixed with water in the spray tank before adding this product.

Cut Stump Application

This product may be used to control re-growth and re-sprouting of woody brush and trees on any site listed on this label.

Cut the woody brush or tree close to the soil or water surface and immediately apply a 50- to 100-percent (undiluted) solution of this product to the freshly-cut surface using an applicator capable of applying this product to the entire cambium. A delay in application could result in reduced performance. For enhanced results, cut the woody brush or tree during period of active growth and full leaf expansion and apply this product. No surfactant is needed for cut stump application.

For control of the tree of heaven (*Ailanthus altissima*), cut the tree close to the soil surface and immediately apply a 50-percent solution of this product (16 fluid ounces per quart of solution) and 10 percent Arsenal herbicide (3 to 4 fluid ounces per quart of solution) in water to the freshly-cut surface.

DO NOT MAKE A CUT STUMP APPLICATION WHEN THE ROOTS OF DESIRABLE WOODY BRUSH OR TREES MAY BE GRAFTED TO THE ROOTS OF THE CUT STUMP, AS INJURY COULD OCCUR IN THE ADJACENT TREES. Some sprouts, stems, or trees can share a common root system. Adjacent trees having a similar age, height and spacing could be an indicator of a shared root system. Whether grafted or shared, injury is likely to occur to adjacent stems or trees when this product is applied to one or more trees sharing common root system.

Woody Brush and Tree Injection and Frill Application

This product may be used to control woody brush and trees listed in this section by injection or frill application on any aquatic and terrestrial site listed on this label.

Inject or apply the equivalent of 1 milliliter (0.04 fluid once) of this product for every 2 to 3 inches of trunk diameter at breast height (DBH). If injecting this product into the woody brush or tree, use equipment capable of penetrating into the living plant tissue under the bark. No surfactant is required for direct injection of this product into woody brush and trees.

For frill application, apply a 50 to 95-percent solution of this product in water, with 0.5% or more by volume of a nonionic surfactant, to either a continuous frill around the tree or to cuts evenly spaced around the tree below all branches. As tree diameter increases, enhanced results can be achieved by applying this product to a continuous frill or more closely spaced cuttings. Avoid application techniques that allow this product to run out of the frill or cut areas. In species that freely exude sap, make the frill or cuts at an oblique angle to produce a cupping effect and apply a 95-percent solution of this product with a nonionic surfactant as described above. For enhanced results, make this application during period of active growth and after full leaf expansion.

Modified High-Volume and Low-Volume Backpack Application

For control and partial control of woody bush, trees and vines listed on this label when using a backpack sprayer or other handheld equipment and a directed low-volume foliar application technique, apply a 4 to 8-percent solution of this product containing 0.5 to 1 percent by volume of a nonionic surfactant evenly over the plant crown to cover 50 percent of the upper foliage of undesirable woody brush, trees and vines.

WOODY BRUSH, TREES AND VINES RATE TABLE

Species	Broadcast Rate (quarts/acre)	Handheld Spray-to-Wet Concentration (% solution)
For partial control, apply this product when at least 50 percent of the new leaves are fully developed.		
Ceanothus*	1.5 – 3.75	0.75 – 1.5
Chamise*	1.5 – 3.75	0.75
Cherry, bitter, black, pin	1.5 – 3.75	1 – 1.5
Cottonwood, eastern	1.5 – 3.75	0.75 – 1.5
Coyote brush	2.3 – 3	1.2 – 1.5
For control, apply this product when at least 50 percent of the new leaves are fully developed.		
Cypress; swamp, bald	1.5 – 3.75	0.75 – 1.5
Deerweed	1.5 – 3.75	0.75 – 1.5
Dewberry	2.3 – 3	0.75 – 1.2
Dogwood*	3 – 3.75	1 – 2
Elderberry	1.5	0.75
Elm*	1.5 – 3.75	0.75 – 1.5
Eucalyptus, blue gum	–	1.5
For control of eucalyptus re-sprouts, apply this product using a handheld sprayer when re-sprouts are 6 to 12 feet tall. Ensure complete coverage.		
Gallberry	1.5 – 3.75	0.75 – 1.5
Gorse*	1.5 – 3.75	0.75 – 1.5
Hackberry, western	1.5 – 3.75	0.75 – 1.5
Hasardia*	1.5 – 3	0.75 – 1.5
Hawthorn	1.5 – 2.3	0.75 – 1.2
Hazel	1.5	0.75
Hickory*	3 – 3.75	1 – 2
Honeysuckle	2.3 – 3	0.75 – 1.2
Hornbeam, American*	1.5 – 3.75	0.75 – 1.5
Huckleberry	1.5 – 3.75	0.75 – 1.5
Ivy, poison	3 – 3.75	1.5
Kudzu	3	1.5
Locust, black*	1.5 – 3	0.75 – 1.5
Madrone resprouts*	–	1.5
Magnolia, sweetbay	1.5 – 3.75	0.75 – 1.5
Manzanita*	1.5 – 3.75	0.75 – 1.5
Maple, red	1 – 3.75	0.75 – 1.2
For control, apply a 0.75 to 1.2-percent solution of this product using a handheld sprayer when leaves are fully developed. For partial control, apply 1 to 3.75 quarts per acre as a broadcast application.		
Maple, sugar	–	0.75 – 1.2
For control, apply this product using a handheld sprayer when at least 50 percent of the new leaves are fully developed.		
Maple, vine*	1.5 – 3.75	0.75 – 1.5
Monkey flower*	1.5 – 3	0.75 – 1.5
Oak, black, white*	1.5 – 3	0.75 – 1.5
Oak; northern pin	1.5 – 3	0.75 – 1.2
For control, apply this product when at least 50 percent of the new leaves are fully developed.		
Oak, poison	3 – 3.75	1.5
Repeat applications might be required to maintain control. Application in the fall must be made before leaves lose green color.		
Oak, post	2.3 – 3	0.75 – 1.2
Oak, red	–	0.75 – 1.2
For control, apply this product using a handheld sprayer when at least 50 percent of the new leaves are fully developed.		
Oak, scrub*	1.5 – 3	0.75 – 1.5
Oak, southern red	1.5 – 3.75	1 – 1.5
Orange, Osage	1.5 – 3.75	0.75 – 1.5
Pepper tree, Brazilian (Florida holly)*	1.5 – 3.75	1.5
Persimmon*	1.5 – 3.75	0.75 – 1.5
Pine	1.5 – 3.75	0.75 – 1.5
Poplar, yellow*	1.5 – 3.75	0.75 – 1.5
Prunus	1.5 – 3.75	1 – 1.5
Raspberry	2.3 – 3	0.75 – 1.2
Redbud, eastern	1.5 – 3.75	0.75 – 1.5
Redcedar, eastern	1.5 – 3.75	0.75 – 1.5
Rose, multiflora	1.5	0.75
Make application prior to leaf deterioration by leaf-feeding insects.		
Russian olive*	1.5 – 3.75	0.75 – 1.5
Sage, black	1.5 – 3	0.75
Sage, white*	1.5 – 3	0.75 – 1.5
Sagebrush, California	1.5 – 3	0.75
Salmonberry	1.5	0.75
Saltbush	–	1
Saltcedar*	3 – 3.75	1 – 2
For partial control, apply a 1 to 2-percent solution of this product using a handheld sprayer or 3 to 3.75 quarts per acre as a broadcast application. For control, apply a 1 to 1.5-percent solution of this product in a tank-mix with Arsenal herbicide or Arsenal Herbicide Applicators Concentrate using a handheld sprayer. For control using broadcast application, apply 1.5 quarts of this product per acre in a tank-mix with an appropriate rate of Arsenal herbicide or Arsenal Herbicide Applicators Concentrate to plants less than 6 feet tall. To control saltcedar greater than 6 feet tall using broadcast application, apply 3 quarts of this product per acre in a tank-mix with a higher rate of Arsenal herbicide or Arsenal Herbicide Applicators Concentrate.		
Sassafras*	1.5 – 3.75	0.75 – 1.5
Sea Myrtle	–	1
Sourwood*	1.5 – 3.75	0.75 – 1.5
Sumac, laurel, poison, smooth, sugarbush, winged*	1.5 – 3	0.75 – 1.5
Sweetgum	1.5 – 2.3	0.75 – 1.5

WOODY BRUSH, TREES AND VINES RATE TABLE

Species	Broadcast Rate (quarts/acre)	Handheld Spray-to-Wet Concentration (% solution)
Also for control, inject 4 milliliters of this concentrated (undiluted) product per plant directly into the lower portion of the main stem using a handheld injection device. ⁴ No surfactant is required.		
Catsclaw*	–	1.2 – 1.5

WOODY BRUSH, TREES AND VINES RATE TABLE

Species	Broadcast Rate (quarts/acre)	Handheld Spray-to-Wet Concentration (% solution)
Swordfern*	1.5 – 3.75	0.75 – 1.5
Tallowtree, Chinese	–	0.75
Tan oak re-sprouts*	–	1.5
Thimbleberry	1.5	0.75
Tobacco, tree*	1.5 – 3	0.75 – 1.5
Toyon*	–	1.5
Trumpetcreeper	1.5 – 2.3	0.75 – 1.2
Vine maple*	1.5 – 3.75	0.75 – 1.5
Virginia creeper	1.5 – 3.75	0.75 – 1.5
Waxmyrtle, southern*	1.5 – 3.75	1.5
Willow	2.3	0.75
Yerba Santa, California*	–	1.5

* Partial control

Other woody brush and trees listed on this label – For partial control, apply 1.5 to 3.75 quarts of this product per acre as a broadcast application or a 0.75 to 1.5-percent solution using a handheld sprayer and a spray-to-wet application technique.

13.0 LIMIT OF WARRANTY AND LIABILITY

Monsanto Company (“Company”) warrants that this product conforms to the chemical description on the label. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NO OTHER EXPRESS WARRANTY OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE OR MERCHANTABILITY IS MADE. This warranty is also subject to the conditions and limitations stated herein.

Buyer and all users shall use this product only for the purposes of and in accordance with the Complete Directions for Use label (“Directions”) and shall promptly notify this Company of any claims whether based in contract, negligence, strict liability, other tort or otherwise.

To the extent consistent with applicable law, buyer and all users are responsible for all loss, injuries or damage from use or handling which results from conditions beyond the control of this Company, including, but not limited to, incompatibility with products other than those set forth in the Directions, application to or contact with desirable vegetation, crop injury or failure of this product to control weed biotypes which develop resistance to glyphosate, unusual weather, weather conditions which are outside the range considered normal at the application site and for the time period when the product is applied, as well as weather conditions which are outside the application ranges set forth in the Directions, use and/or application in any manner not explicitly set forth in or inconsistent with the Directions, moisture conditions outside the moisture range specified in the Directions, or the presence of products other than those set forth in the Directions in or on the soil, crop or treated vegetation.

This Company does not warrant any product reformulated or repackaged from this product except in accordance with this Company’s stewardship requirements and with express written permission from this Company.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE LIMIT OF THE LIABILITY OF THIS COMPANY OR ANY OTHER SELLER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT (INCLUDING CLAIMS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE) SHALL BE THE PURCHASE PRICE PAID BY THE USER OR BUYER FOR THE QUANTITY OF THIS PRODUCT INVOLVED, OR, AT THE ELECTION OF THIS COMPANY OR ANY OTHER SELLER, THE REPLACEMENT OF SUCH QUANTITY, OR, IF NOT ACQUIRED BY PURCHASE, REPLACEMENT OF SUCH QUANTITY. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL THIS COMPANY OR ANY OTHER SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES.

Upon opening and using this product, buyer and all users are deemed to have accepted the terms of this LIMIT OF WARRANTY AND LIABILITY which may not be varied by any verbal or written agreement. If terms are not acceptable, return at once unopened.

Monsanto and Vine Design, Roundup, Roundup Custom and Design, and TRUEBLUE ADVANTAGE PROVEN RELIABLE SUPPORTED and Design, are trademarks of Monsanto Technology LLC. All other trademarks are the property of their respective owners.

EPA Reg. No. 524-343

In case of an emergency involving this product, or for medical assistance,
call collect, day or night, (314) 694-4000.



©2018

Packed for:

MONSANTO COMPANY

800 N. LINDBERGH BLVD.

ST. LOUIS, MISSOURI, 63167 U.S.A.

ATENCIÓN:

Esta etiqueta de muestra se entrega únicamente para información general.

- Este producto pesticida puede no estar todavía disponible o aprobado para la venta o utilización en su localidad.
- Usted tiene la responsabilidad de cumplir todas las leyes federales, estatales y locales, así como todas las reglamentaciones relativas a la utilización de pesticidas.
- Antes de utilizar un pesticida, asegúrese de que esté aprobado en su estado o localidad.
- Su estado o localidad puede exigir precauciones adicionales e instrucciones para la utilización de este producto que no están incluidas aquí.
- Monsanto no garantiza el lo completo ni la certeza de esta etiqueta de la espécimen. La información encontró en esta etiqueta puede diferir de la información encontró en la etiqueta del producto. Usted debe tener consigo la etiqueta aprobada por la agencia EPA cuando utilice el producto y debe leer y respetar todas las instrucciones en la etiqueta.
- No debe basarse sobre las precauciones, las instrucciones de utilización y cualquier otra información en esta etiqueta para utilizar algún otro producto similar.
- Siempre siga las precauciones y las instrucciones para el uso en la etiqueta del pesticida que usted utiliza.



Instrucciones de uso completas

Un herbicida de amplio espectro para aplicación postemergencia, para el control de malezas acuática e industrial, ornamental, en céspedes, forestación, lados de carreteras, servidumbres de paso, cultivos selectos y otros usos terrestres indicados. (Para una lista completa de aplicaciones acuáticas y terrestres, vea la sección Modo de empleo de esta etiqueta).

Nº. Reg. EPA 524-343

2018-1

GROUP 9 HERBICIDE

Lea toda la etiqueta antes de usar este producto. Use solo según las instrucciones de la etiqueta.

EVITE EL CONTACTO DE ESTE HERBICIDA CON EL FOLLAJE, TALLOS VERDES, RAÍCES NO LEÑOSAS EXPUESTAS O FRUTOS EXPUESTOS DE LOS CULTIVOS, PLANTAS Y ÁRBOLES DESEABLES, PORQUE LAS PLANTAS PUEDEN SUFRIR GRAVES DAÑOS O SER DESTRUIDAS.

ESTE ES UN PRODUCTO PARA USARSE TAL Y COMO ESTÁ PREPARADO. MONSANTO COMPANY NO LO HA DISEÑADO NI LO HA REGISTRADO PARA QUE SEA REFORMULADO. VEA LA ETIQUETA DEL ENVASE INDIVIDUAL PARA CONOCER LAS LIMITACIONES DE REEMPAQUE.

Antes de comprar o usar el producto, lea "LÍMITES EN LA GARANTÍA Y EN LA RESPONSABILIDAD" en la última sección de la etiqueta. Si las condiciones son inaceptables, devuelva el producto inmediatamente sin abrir el envase.

No todos los productos recomendados en esta etiqueta han sido registrados para su uso en California. Verifique el estado de registro de cada producto en California antes de utilizarlo.

1.0 INGREDIENTES

INGREDIENTE ACTIVO:

*Glifosato, N-(fosfonometil) glicina, en la forma de su sal de isopropilamina 53.8%

OTROS INGREDIENTES: 46.2%

100.0%

*Contiene 648 gramos por litro o 5.4 libras por galón norteamericano del ingrediente activo glifosato, en la forma de su sal de isopropilamina, lo cual es equivalente a 480 gramos por litro o 4.0 libras por galón norteamericano (39.9% por peso) del ácido, glifosato.

2.0 NÚMEROS DE TELÉFONO IMPORTANTES

1. PARA INFORMACIÓN SOBRE EL PRODUCTO O AYUDA PARA UTILIZAR ESTE PRODUCTO,

LLAME GRATIS AL (800) 332-3111

2. EN CASO DE EMERGENCIA RELACIONADA CON ESTE PRODUCTO O PARA AYUDA MÉDICA, LLAME POR COBRAR, DE DIA O DE NOCHE, AL (314) 694-4000

3.0 DECLARACIONES PREVENTIVAS

3.1 Riesgos para los seres humanos y los animales domésticos

Manténgase fuera del alcance de los niños PRECAUCIÓN

ANIMALES DOMÉSTICOS: Se considera que este producto es relativamente no tóxico para perros y otros animales domésticos, sin embargo, la ingestión de este producto o de abundantes cantidades de vegetación rociada recientemente podría causar irritación gastrointestinal temporal (vómitos, diarrea, cólicos, etc.). Si se observan dichos síntomas, dé al animal suficiente cantidad de líquidos para evitar la deshidratación. Llame a un veterinario si los síntomas persisten por más de 24 horas.

Equipo de protección personal (EPP)

Los usuarios y personas que manipulan este producto deben usar: camisa de mangas largas y pantalones largos, zapatos y calcetines.

Respete las instrucciones del fabricante para limpiar y mantener los equipos de protección personal (EPP). En caso de que no haya instrucciones, use detergente y agua caliente. Mantenga el EPP aparte del resto de la ropa y lávelo por separado.

Recomendaciones de seguridad para el usuario:

Los usuarios deben:

- Lavarse las manos antes de comer, beber, masticar chicle, usar tabaco o usar el baño.
- Quitarse la ropa de inmediato si el pesticida traspasa la ropa. Luego deben lavarse muy bien y ponerse ropa limpia.

3.2 Riesgos para el medio ambiente

Matar las malezas acuáticas puede dar lugar a una reducción o pérdida de oxígeno en el agua debido a la descomposición de material vegetal muerto. Esta pérdida de oxígeno puede causar que los peces se asfixien. Antes de aplicar pesticidas a aguas públicas, consulte con la agencia de su estado que sea la principal responsable de su regulación para determinar si se necesita un permiso. Para usos terrestres, no aplique directamente al agua, en áreas donde el agua superficial esté presente o en áreas intermareales por debajo del nivel medio de mareas altas, excepto si se aplica por aire por encima de la cobertura forestal. No contamine el agua cuando limpie el equipo o deseche el agua de lavado y enjuague del equipo.

3.3 Riesgos físicos o químicos

Para mezclar, almacenar y aplicar la solución de rocío de este producto, se pueden usar recipientes de acero inoxidable, fibra de vidrio, plástico o recipientes de acero recubiertos internamente con plástico.

NO MEZCLE, ALMACENE O APLIQUE ESTE PRODUCTO O LAS SOLUCIONES DE ROCÍO DE ESTE PRODUCTO EN ENVASES DE ACERO GALVANIZADO O SIN REVESTIMIENTO (EXCEPTO ACERO INOXIDABLE) O EN TANQUES DE ROCÍO. Si se utiliza en estos envases o tanques, este producto o las soluciones de rocío de este producto reaccionan y producen gas hidrógeno que puede formar una mezcla de gases altamente inflamable. Esta mezcla de gases podría incendiarse o explotar si está en contacto con fuego, chispas, sopletes para soldar, cigarrillos encendidos o cualquier otra fuente de ignición y causar lesiones personales graves.

MODO DE EMPLEO

Se considera una violación a la ley federal usar este producto de una manera que no sea la indicada en la etiqueta. Este producto solo puede utilizarse de acuerdo con las instrucciones de uso en la etiqueta o según las etiquetas complementarias que se publican por separado. Puede solicitar las etiquetas complementarias para este producto a su vendedor minorista autorizado de Monsanto o a su representante de Monsanto Company.

No aplique este producto de manera que entre en contacto con los trabajadores u otras personas, ya sea directamente o por arrastre. Solamente los aplicadores que usan protección podrán estar en el área durante su aplicación. Para verificar requisitos específicos de su tribu o estado, consulte con la agencia responsable de la regulación del uso de pesticidas.

Requisitos para uso agrícola

Utilice este producto solo de acuerdo con la etiqueta y con las Normas de Protección para Trabajadores, 40 CFR Parte 170. Estas Normas contienen los requisitos para la protección de trabajadores agrícolas en granjas, bosques, viveros e invernaderos y para las personas que manipulan pesticidas agrícolas. Contienen los requisitos para capacitar, descontaminar, notificar y ofrecer asistencia de emergencia. También contienen instrucciones específicas y excepciones relativas a las afirmaciones en esta etiqueta sobre los equipos de protección personal (EPP) y los intervalos de acceso restringido. Los requisitos en esta caja se refieren únicamente a las aplicaciones de este producto cubiertas por las Normas de Protección para Trabajadores.

No entre ni permita la entrada de personal a las áreas tratadas durante el intervalo de entrada restringida (REI, por sus siglas en inglés) de 4 horas. El EPP que se requiere para el acceso anticipado a zonas tratadas de acuerdo con las Normas de Protección para Trabajadores y que incluye el contacto con material tratado, como plantas, tierra o agua es: overoles, zapatos con calcetines y guantes resistentes a sustancias químicas confeccionados con cualquier tipo de material impermeable.

Requisitos para usos no agrícolas

Los requisitos en esta caja se refieren a las aplicaciones de este producto que NO cubren las Normas de Protección para Trabajadores para pesticidas agrícolas (40 CFR, Parte 170). Las Normas se aplican cuando este producto se utiliza para producir plantas agrícolas en granjas, bosques, viveros o invernaderos.

Mantenga a las personas y a las mascotas fuera de las áreas tratadas hasta que la solución de rocío se haya secado.

4.0 ALMACENAMIENTO Y ELIMINACIÓN

El almacenamiento y la eliminación adecuados de los pesticidas son fundamentales para evitar la exposición de las personas y el medio ambiente a consecuencia de pérdidas y derrames del producto, excedentes o desechos y actos de vandalismo. No permita que este producto contamine el agua, ni los alimentos para personas o animales, ni las semillas, por medio del almacenamiento y la eliminación.

ALMACENAMIENTO DEL PESTICIDA: GUARDE A UNA TEMPERATURA SUPERIOR A LOS 5°F (-15°C) PARA EVITAR QUE EL PRODUCTO SE CRISTALICE. Los cristales se depositarán en el fondo. Si se cristaliza, caliente hasta 68°F (20°C) para volver a disolver y haga girar o agite el envase o vuelva a circular el contenido de envases más grandes para mezclar bien antes de usar. Guarde los pesticidas lejos de los alimentos para personas, los alimentos para mascotas, los alimentos para animales, las semillas, los fertilizantes y los materiales de uso veterinario. Mantenga el envase cerrado para evitar los derrames y la contaminación. Vea la etiqueta del envase individual para conocer las condiciones adicionales de almacenamiento, si las hay.

ELIMINACIÓN DEL PESTICIDA: Para evitar desechos, utilice todo el material contenido en este envase, incluyendo los residuos del enjuague, aplicándolo según las indicaciones de la etiqueta. Si no se pueden evitar los desechos, ofrezca el producto restante a un centro de eliminación de desechos o a un programa de desecho de pesticidas. Estos programas suelen ser manejados por los gobiernos estatales o locales o por la industria. Toda eliminación debe seguir los reglamentos y procedimientos federales, estatales y locales pertinentes.

MANEJO Y ELIMINACIÓN DEL ENVASE: Consulte la etiqueta pegada al envase para conocer las instrucciones de manejo y eliminación del envase, así como los límites de relleno.

5.0 INFORMACIÓN DEL PRODUCTO

Descripción del producto: Este producto es un herbicida sistémico para aplicar postemergencia que, mezclado en el tanque de rociado con un surfactante aprobado para uso acuático, se puede usar para el control de malezas tanto acuático como terrestre. Este producto proporciona un control de amplio espectro de muchas malezas anuales y perennes, árboles, enredaderas y matorrales leñosos. Este producto no controla malezas sumergidas ni proporciona control residual de malezas en el suelo. Está formulado como líquido soluble en agua que, a menos que se indique lo contrario, requiere diluirse con agua u otra sustancia vehicular y agregar un surfactante de acuerdo con las instrucciones en la etiqueta y con el lugar donde se pretende usar antes de la aplicación, usando un equipo estándar y especializado para aplicar pesticidas.

Mecanismo de la acción: El ingrediente activo en este producto inhibe una enzima que se encuentra solo en plantas y microorganismos y que es esencial para la formación de aminoácidos específicos.

No tiene actividad en el suelo: Este producto se adhiere con fuerza a las partículas en el suelo y no proporciona control residual de malezas. Las malezas tienen que haber emergido en el momento de la aplicación para que la aplicación foliar de este producto las controle. Este producto no tendrá efecto sobre las semillas de las malezas en el suelo, así que estas continuarán germinando. Este producto tampoco tendrá efecto en los rizomas o raíces de las plantas no conectadas que estén debajo de la superficie del suelo.

Degradación biológica: La degradación de este producto es primariamente un proceso biológico de los microbios de la tierra.

Etapas de malezas: Las malezas acuáticas deben tener follaje por encima de la superficie del agua para que este producto pueda controlarlas. En los lugares terrestres, resulta más fácil controlar las malezas anuales y perennes cuando son pequeñas. Consulte la sección "MALEZAS CONTROLADAS" en esta etiqueta para obtener más información sobre el control de malezas específicas.

Prácticas de cultivo: El control de malezas puede ser inferior cuando se aplica el producto a malezas anuales o perennes que hayan sido segadas, que hayan servido de alimento para animales o hayan sido cortadas, y que no hubiesen crecido nuevamente hasta el nivel recomendado para el tratamiento. Aplique siempre la proporción mayor de este producto dentro del rango indicado cuando las malezas son muy densas o cuando crecen en áreas no tocadas (no cultivadas). El control de malezas puede ser inferior cuando se tratan malezas dañadas por enfermedades o insectos, si están cubiertas con polvo o si las condiciones de crecimiento de las malezas son deficientes.

Cobertura del rocío: Para obtener mejores resultados, la cobertura del rocío debe ser completa y uniforme. No rocíe el follaje hasta el punto de escurrimiento.

Resistencia a la lluvia: La lluvia o la inmersión de las malezas acuáticas por acción de las olas en un plazo de 4 horas después de su aplicación puede lavar este producto del follaje y puede requerirse una segunda

aplicación para el control adecuado de las malezas. Consulte las secciones sobre uso específico en esta etiqueta para obtener información adicional sobre los intervalos mínimos requeridos antes de repetir la aplicación de este producto.

Aparición de los síntomas: Este producto se mueve dentro de la planta desde el punto de aplicación sobre el follaje hasta las raíces. Los efectos visibles son marchitamiento gradual y amarilleo progresivo de la planta hasta el oscurecimiento total de los brotes por encima de la tierra y el deterioro de las partes subterráneas de la planta. En la mayoría de las malezas anuales, los efectos son visibles en 2 a 4 días pero en la mayoría de las malezas perennes los efectos podrían no ser visibles hasta 7 días o más después de la aplicación. El frío extremo o el cielo muy nublado después de la aplicación podrían retardar la actividad del producto y hacer que el efecto visual se demore.

Proporciones de aplicación máxima: Las cantidades de aplicación o uso máximas especificadas en esta etiqueta están expresadas en unidades de volumen (onzas líquidas o cuartos de galón) de este producto por acre. Sin embargo, las proporciones máximas permitidas se aplican a este producto combinado con todos y cada uno de los otros herbicidas que contienen el ingrediente activo glifosato, ya sea que se apliquen por separado o como mezclas de tanque, sobre la base del total de libras de glifosato (equivalentes ácidos) por acre. Si se aplica más de un producto que contiene glifosato en el mismo terreno el mismo año, debe asegurarse de que el total de glifosato empleado (equivalentes de libras de ácido) no excede el máximo permitido. Consulte la sección "INGREDIENTES" de esta etiqueta para la información necesaria sobre el producto.

A menos que se especifique de otra manera en esta etiqueta, el total combinado de todas las aplicaciones de este producto en un lugar no debe exceder los 8 cuartos de galón (8 libras de ácido de glifosato) por acre por año.

NOTA: El uso de este producto de cualquier manera contraria a las indicaciones contenidas en esta etiqueta, puede causar lesiones a personas, animales, cultivos u otra vegetación deseada o pueden ocurrir otras consecuencias no deseadas.

6.0 MANEJO DE RESISTENCIA DE MALEZAS

GROUP	9	HERBICIDE
-------	---	-----------

El glifosato, el ingrediente activo de este producto, es un herbicida del grupo 9 según el sistema de clasificación de modo de acción de la Weed Science Society of America. Cualquier población de malezas puede contener plantas naturalmente resistentes a los herbicidas del Grupo 9. Las malezas resistentes a los herbicidas del Grupo 9 pueden tratarse con buenos resultados utilizando un herbicida de otro grupo (ya sea solo o en una mezcla de acuerdo a las instrucciones en la etiqueta), adoptando otros métodos de cultivo o mecánicos para el control de malezas, o a través de una combinación de ambos. Consulte con su representante local de la compañía, el agente de extensión cooperativa del estado, un asesor profesional u otra autoridad calificada para determinar las acciones adecuadas para controlar malezas resistentes específicas.

6.1 Prácticas de manejo de malezas

Las poblaciones resistentes surgen cuando una dosis normal de un herbicida determinado no controla a contadas plantas individuales en condiciones ambientales normales. Si no hay otras medidas de control, estos individuos sobreviven, producen semillas y con el tiempo se convierten en el biotipo dominante en el campo a través de la selección continua. La mejor manera de reducir esta selección es usar prácticas diversas de control de malezas, tales como múltiples herbicidas con diferentes mecanismos de acción y, con frecuencia, combinados con diversas prácticas de cultivo y mecánicas.

Para minimizar la incidencia de biotipos resistentes a herbicidas, incluyendo los resistentes al glifosato, implemente las siguientes opciones de manejo de malezas que sean prácticas en su situación. Estas prácticas de manejo se aplican para reducir la propagación de biotipos resistentes confirmados (control de biotipos resistentes existentes) y para reducir el potencial para selección de resistencia de nuevas especies (control proactivo de la resistencia).

- Diversifique su enfoque del manejo de malezas concentrándose en evitar la producción de semillas de malezas y en reducir la cantidad de semillas de malezas en la tierra.
- Siembre los cultivos en campos con la menor cantidad de malezas posible y manténgalos así.
- Siembre semillas que tengan la menor cantidad de malezas posible.
- Haga un reconocimiento rutinario de los campos y los sitios de aplicación antes y después de la aplicación del herbicida.
- Use múltiples mecanismos de acción herbicida eficaces contra las malezas más molestas en su lugar de aplicación y contra aquellas de resistencia conocida.
- Aplique los herbicidas en las proporciones de aplicación indicadas en la etiqueta cuando las malezas estén dentro del rango de tamaño indicado en la etiqueta.
- Resalte las prácticas de cultivo que inhiben las malezas usando competencia de cultivos.
- Use prácticas de manejo de malezas mecánicas y biológicas, cuando sea adecuado.
- Evite el movimiento de semillas de malezas o de propágulos vegetativos entre campos o dentro de un campo.
- Controle las semillas de malezas en la cosecha y después de la cosecha para evitar que las semillas se acumulen.

6.2 Manejo de biotipos resistentes al glifosato

Es necesario realizar las pruebas adecuadas para confirmar la resistencia de una maleza al glifosato. Llame al 1-800-ROUNDUP (1-800-768-6387) o póngase en contacto con su representante de Monsanto Company para determinar si se confirmó la resistencia de algún biotipo de maleza en particular en su región, o visite en Internet

www.weedresistancemanagement.com o www.weedscience.org.

Las malezas resistentes al glifosato se pueden controlar o manejar con la aplicación de este producto en combinación con herbicidas residuales de preemergencia y/o otros herbicidas de postemergencia etiquetados para el control de la maleza objetivo en el cultivo en cuestión o en el lugar de la aplicación. Para obtener más información, vea la sección "MALEZAS CONTROLADAS" en esta etiqueta.

Dado que la incidencia de malezas resistentes es difícil de detectar antes de usar, Monsanto Company no será responsable de ninguna pérdida que tenga lugar porque este producto no logre controlar las malezas resistentes.

7.0 MEZCLAS

Para mezclar, almacenar y aplicar la solución de rocío de este producto, se pueden usar recipientes limpios de acero inoxidable, fibra de vidrio, plástico o recipientes de acero recubiertos internamente con plástico.

NO MEZCLE, ALMACENE O APLIQUE ESTE PRODUCTO O LAS SOLUCIONES DE ROCÍO DE ESTE PRODUCTO EN ENVASES DE ACERO GALVANIZADO O SIN REVESTIMIENTO (EXCEPTO ACERO INOXIDABLE) O EN TANQUES DE ROCÍO.

Elimine todo riesgo de que se forme un sifón de retorno de los contenidos del tanque a la fuente de la sustancia vehicular, al preparar la mezcla. Utilice aparatos aprobados para evitar la formación de sifones de retorno en lugares donde lo exijan las normas locales o estatales.

Un filtro de malla de 50 hilos para la boquilla o un colador en el equipo de rocío es adecuado.

Limpie las piezas del rociador inmediatamente después de su utilización lavándolas bien con agua.

7.1 Mezcla con agua

EL RENDIMIENTO DE ESTE PRODUCTO PODRÍA REDUCIRSE CONSIDERABLEMENTE SI SE UTILIZA AGUA CON SEDIMENTOS DE TIERRA COMO SUSTANCIA VEHICULAR. NO MEZCLE ESTE PRODUCTO CON AGUA DE ESTANQUES O ACEQUIAS QUE SE VEA TURBIA O ENFANGADA.

Este producto se mezcla fácilmente con agua. Mezcle las soluciones de rocío de este producto de la siguiente manera. Primero, llene el tanque de mezclado o de rocío con agua limpia. Agregue la cantidad requerida de este producto hacia el final del proceso de llenado y mezcle con cuidado. Es posible que durante la mezcla la solución de rocío produzca espuma. Para prevenir o minimizar la formación de espuma, mezcle con cuidado, tapone las derivaciones y mangüeras de retorno en el fondo del tanque y, si es necesario, agregue un agente apropiado a la solución de rocío para evitar la formación de espuma o eliminarla.

7.2 Surfactantes

A menos que se indique lo contrario, este producto requiere que se agreguen 2 o más cuartos de galón de un surfactante no iónico cuyo uso con herbicidas esté recomendado en la etiqueta por cada 100 galones de solución de rocío (0.5% o más por volumen). A menos que se indique lo contrario, use una concentración mayor de surfactante cuando alguna de las siguientes condiciones aplique al uso de este producto:

- Se agregan surfactantes que contienen menos del 70 por ciento del ingrediente activo
- Se aplica al voleo usando un alto volumen de sustancia vehicular o usando equipo de rociado manual
- Se aplica en condiciones de crecimiento adversas o en cualquier momento en que las malezas están bajo estrés
- Se aplica como mezcla de tanque con otros productos
- Se aplica a malezas, matorrales leñosos, árboles y enredaderas difíciles de controlar

NOTA: Para la aplicación directa de soluciones de rocío de este producto en malezas acuáticas emergidas o para usar en áreas intermareales por debajo del nivel medio de mareas altas, o en áreas de aplicación donde una zona de transición asegurará que un rocío excesivo de un cuerpo de agua adyacente no se puede mantener, debe usar un surfactante que esté aprobado también para uso acuático. Para las aplicaciones terrestres, también se requiere un surfactante en la solución de rocío, pero no tiene que estar aprobado para uso acuático.

RESTRICCIÓN: Si se agrega un surfactante que NO esté aprobado para uso acuático a la solución de rocío, NO lo aplique directamente al agua o sobre esta ni use en áreas intermareales por debajo del nivel medio de mareas altas.

Consulte con la principal agencia reguladora de pesticidas de su estado si necesita información adicional sobre los surfactantes que están aprobados para uso acuático.

Lea y siga todas las declaraciones preventivas e instrucciones de modo de empleo en la etiqueta del surfactante.

Toda referencia en esta etiqueta a la concentración de surfactante en la solución de rocío está basada en un porcentaje de volumen. Vea la tabla a continuación para obtener la concentración adecuada de surfactante en la solución de rocío.

Volumen deseado de solución de rocío	Cantidad de surfactante para obtener la concentración indicada en la solución de rocío (porcentaje por volumen)					
	0.5%	0.75%	1%	1.5%	4%	8%
1 galón	2/3 onza líquida	1 cuarto de galón	1.3 onzas líquidas	2 onzas líquidas	5 onzas líquidas	10 onzas líquidas
25 galones	16 onzas líquidas	24 onzas líquidas	1 cuarto de galón	1.5 cuartos de galón	4 cuartos de galón	2 galones
100 galones	2 cuartos de galón	3 cuartos de galón	1 cuarto de galón	1.5 galones	4 galones	8 galones

2 cucharadas soperas = 1 onza líquida (onz. líq.)

7.3 Mezclas de tanque

Este producto no proporciona control residual de malezas. Este producto puede mezclarse en tanques con otros herbicidas para proporcionar control residual de malezas en la tierra, un espectro más amplio de control de malezas o un mecanismo de acción alternativo.

NO TODOS LOS PRODUCTOS PARA MEZCLA DE TANQUE INDICADOS EN ESTA ETIQUETA ESTÁN APROBADOS PARA USO EN SITIOS ACUÁTICOS. Consulte las etiquetas individuales de todos los productos usados en la mezcla de tanque para conocer los usos aprobados y las proporciones de aplicación.

Cuando en esta etiqueta se indica una mezcla de tanque con un ingrediente activo genérico como 2,4-D, o dicamba o cualquier otro producto o material, el usuario asume la responsabilidad de asegurarse de que la aplicación específica que está preparando y el sitio de uso estén incluidos en la etiqueta del producto utilizado en la mezcla.

Monsanto Company no ha realizado pruebas en todas las fórmulas de producto de la mezcla de tanque para verificar la compatibilidad, antagonismo o reducción en el rendimiento del producto. La mezcla de este producto con herbicidas u otros materiales no recomendados en esta etiqueta puede dar como resultado una reducción en su rendimiento. Hasta el grado que sea compatible con la legislación pertinente, el comprador y todos los usuarios son responsables por todas las pérdidas o daños en relación con el uso o el manejo de mezclas de este producto con herbicidas u otros materiales que no se recomiendan expresamente en esta etiqueta o en las etiquetas complementarias separadas o en las Fichas Técnicas publicadas para este producto.

Consulte todas las etiquetas de cada uno de los productos, las etiquetas complementarias y las Fichas Técnicas de todos los productos de la mezcla de tanque, y respete todas las precauciones y limitaciones de la etiqueta, incluidas las restricciones de la época de aplicación, las restricciones de suelo, los intervalos mínimos para volver a cosechar y/o las restricciones de rotación. Utilice conforme con las declaraciones preventivas más restrictivas de cada producto en la mezcla de tanque.

Este producto puede aplicarse en cualquier proporción indicada en esta etiqueta en una mezcla de tanque con los siguientes productos para proporcionar control preemergencia y/o mejor control postemergencia de las malezas indicadas en las etiquetas de cada producto.

Arsenal; Herbicida concentrado para aplicadores Arsenal; Banvel; Banvel 480; Barricade 4L; Barricade 65WG; Certainty® Turf; Chopper Gen2; Crossbow; Endurance; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XLT Specialty; Gallery SC; Gallery 75 Dry Flowable Specialty; Garlon; 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Goal 2XL; GoalTender; Habitat; Hyvar X; Hyvar X-L; Karmex DF; Krenite S Brush Control Agent; Krovar I DF; Landmark; Landmark XP; Oust Extra; Oust XP; Outrider®; Plateau; Poast; Poast Plus; Ronstar 50 WSP; Ronstar Flo; Ronstar G; Sahara DG; Spike 20P Specialty; Spike 80 DF Specialty; Stalker; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Surflan Pro; Telar XP; Tordon 101 Mixture Specialty; Tordon 22K Specialty; Tordon K Herbicide Specialty; Transline Specialty; Vanquish; Velpar DF CU; Velpar DF VU; Velpar L CU; Velpar L; Velpar L VU; 2,4-D; atrazina; dicamba; bromacil; diuron; imazapyr; metlsulfuron methyl; oryzalin; pendimethalin; prodiamine; simazine; sulfosulfuron; trichlopyr

Al usar en combinaciones como se describe en esta etiqueta y hasta el grado que sea compatible con la legislación pertinente, la responsabilidad de Monsanto de ninguna manera incluirá ninguna pérdida, daño o lesión que no sea exclusiva y directamente causada por incluir el producto de Monsanto en dicho uso combinado.

7.4 Procedimiento de mezcla en tanque

Siempre determine con anticipación la compatibilidad de todos los productos de la mezcla de tanque en la sustancia vehicular, mezclando antes pequeñas cantidades proporcionales.

Agregue componentes individuales en la mezcla de tanque en el siguiente orden: polvos mojables, formulaciones fluidas, concentrados emulsionantes, aditivos de reducción de la dispersión, líquidos solubles en agua (este producto), surfactantes no iónicos. Asegúrese de que los productos en la mezcla de tanque estén bien mezclados en la solución de rocío antes de agregar este producto.

Mezcle solo la cantidad de solución de rocío que aplicará ese día. La aplicación de soluciones de mezcla de tanque que se dejan reposar toda la noche podrían tener un control de malezas reducido.

Continúe agitando suavemente todo el tiempo hasta haber rociado todo el contenido del tanque. Si se deja que la mezcla para rociar se asiente, agite bien para que la mezcla vuelva a estar en suspensión antes de continuar la aplicación.

Mantenga la manguera de retorno en el fondo del tanque, o próximo a este para minimizar la formación de espuma.

Un filtro de malla de 50 hilos para la boquilla o un colador en el equipo de rocío es adecuado.

7.5 Mezcla de concentraciones de solución de rocío

Toda referencia en esta etiqueta a la concentración de este producto en una solución de rocío está basada en un porcentaje de volumen.

Prepare el volumen deseado de solución de rocío en una concentración determinada mezclando con agua la cantidad de este producto que se indica en la siguiente tabla.

Volumen deseado de solución de rocío	Cantidad de Roundup Custom para uso acuático y terrestre para lograr la concentración indicada en la solución de rocío (porcentaje por volumen)					
	0.5%	0.75%	1%	1.5%	4%	8%
1 galón	2/3 onza líquida	1 cuarto de galón	1.3 onzas líquidas	2 onzas líquidas	5 onzas líquidas	10 onzas líquidas
25 galones	16 onzas líquidas	24 onzas líquidas	1 cuarto de galón	1.5 cuartos de galón	4 cuartos de galón	2 galones
100 galones	2 cuartos de galón	3 cuartos de galón	1 cuarto de galón	1.5 galones	4 galones	8 galones

2 cucharadas soperas = 1 onza líquida (onz. líq.)

Para llenar los rociadores tipo mochila y de bombeo, recomendamos mezclar la cantidad apropiada de este producto con agua en un envase más grande y luego llenar el rociador con esta solución mezclada.

7.6 Colorantes y tintes

A las soluciones de rocío de este producto se le pueden agregar colorantes o tinturas para marcar, sin embargo estos podrían reducir su rendimiento. Use colorantes o tinturas según las indicaciones del fabricante.

7.7 Aditivos de reducción de dispersión

Se pueden utilizar aditivos para reducir la dispersión en todos los tipos de equipo de aplicación, a excepción de aplicadores con enjugador, barras de esponja y aplicación por goteo controlado (CDA). Cuando se use un aditivo para reducir la dispersión, lea y siga cuidadosamente todas las precauciones, limitaciones y el resto de la información de la etiqueta del producto. El uso de aditivos de reducción del arrastre puede afectar la cobertura de rocío, lo cual puede dar lugar a que se reduzca la eficacia de este producto.

8.0 EQUIPOS Y TÉCNICAS PARA LA APLICACIÓN

Este producto puede aplicarse usando los siguientes equipos:

Equipo de aplicación aérea—con alas fijas y helicóptero

Equipo de aplicación terrestre—sistemas con brazo o sin brazo, rociadores de arrastre, flotadores, rociadores de captación, cupés de rocío y otros equipos de aplicación terrestre al voleo

Rociadores manuales—rociadores de mochila, rociadores con presión de bombeo, pistolas de mano, bastones de mano, sopladores de vaporización*, lanzas y otros equipos rociadores de mano y a motor empleados para dirigir el rocío al follaje de la maleza.

* Este producto no está registrado en California ni en Arizona para su uso en sopladores de vaporización.

Equipo de aplicación selectiva—rociadores de recirculación, rociadores con pantalla y campana, aplicador con enjugador, barra con esponja, inyectores de tallo sencillos o huecos, inyectores de áboles, botella rociadora

Sistemas por inyección—rociadores por inyección aéreos o terrestres

Aplicador por goteo controlado (CDA)—aplicadores de mano o instalados en brazos que producen un rocío formado por un estrecho rango de tamaños de gotas

APLIQUE ESTE PRODUCTO UTILIZANDO EQUIPOS DEBIDAMENTE MANTENIDOS Y CALIBRADOS QUE SEAN CAPACES DE ROCIAR CON PRECISIÓN EL VOLUMEN DESEADO.

No use ningún sistema de irrigación para aplicar este producto.

8.1 Manejo de la dispersión del rocío

EVITE EL CONTACTO DE ESTE HERBICIDA CON EL FOLLAJE, TALLOS VERDES, RAÍCES NO LEÑOSAS EXPUESTAS O FRUTOS EXPUESTOS DE LOS CULTIVOS, PLANTAS Y ÁBOLES DESEABLES, PORQUE LAS PLANTAS PUEDEN SUFRIR GRAVES DAÑOS O SER DESTRUIDAS.

No permita que la solución herbicida se vaporice, gotee, disperse o salpique sobre la vegetación deseable ya que incluso cantidades pequeñas de este producto pueden causar daños graves o destruir el cultivo, plantas u otra vegetación que no era el objetivo de la aplicación.

EVITE LA DISPERSIÓN. TENGA SUMO CUIDADO AL APlicAR ESTE PRODUCTO PARA EVITAR DAÑOS A LAS PLANTAS Y CULTIVOS DESEABLES.

Evitar la dispersión del rocío en el lugar de aplicación es responsabilidad del aplicador. La interacción de varios factores relacionados con el clima y el equipo determina la posibilidad de dispersión del rocío. El aplicador y el cultivador son responsables de considerar todos estos factores al tomar decisiones relacionadas con la aplicación de este producto.

Las probabilidades de daño causado por la dispersión del rocío al aplicar este producto aumentan cuando hay viento con ráfagas, cuando la velocidad del viento aumenta, cuando la dirección del viento cambia constantemente o cuando hay otras condiciones meteorológicas que favorecen la dispersión del rocío. Al rociar, evite las combinaciones de presión y tipo de boquillas que resulten en salpicaduras o partículas finas (niebla) que es probable que se dispersen.

PARA EVITAR DAÑAR LA VEGETACIÓN DESEADA ADJUNTA, SE DEBEN MANTENER ZONAS DE TRANSICIÓN ADECUADAS.

EVITE APlicAR ESTE PRODUCTO A ALTA VELOCIDAD O PRESIÓN EXCESIVA.

8.2 Equipo de aplicación aérea

A menos que se prohíba de otra manera, todas las aplicaciones al voleo de este producto indicadas en esta etiqueta se pueden realizar con equipos de aplicación aérea, de ser posible, siempre que la persona que aplica el producto cumpla con las precauciones y restricciones especificadas en esta etiqueta y en las etiquetas complementarias separadas que se publican para este producto.

NO APLIQUE ESTE PRODUCTO CON EQUIPOS AÉREOS EXCEPTO BAJO LAS CONDICIONES QUE SE ESPECIFICAN EN ESTA ETIQUETA O EN LAS ETIQUETAS COMPLEMENTARIAS SEPARADAS QUE SE PUBLICAN PARA ESTE PRODUCTO.

PARA CONOCER LAS INSTRUCCIONES, RESTRICCIONES Y REQUISITOS ESPECÍFICOS RELACIONADOS CON LA APLICACIÓN AÉREA DE ESTE PRODUCTO EN CALIFORNIA, O EN CONDADOS ESPECÍFICOS DE ESE ESTADO, CONSULTE LAS LIMITACIONES DE LA APLICACIÓN AÉREA EN ESE ESTADO O CONDADO QUE SE PRESENTA EN ESTA SECCIÓN.

Aplique este producto en la proporción recomendada en esta etiqueta en 3 a 25 galones de agua por acre, a menos que se indique de otra manera. Use un volumen de rocío mayor dentro de este rango si las malezas, matorrales, árboles y enredaderas son densas o forman varias capas de cobertura.

Evite la aplicación directa en masas de agua.

Pueden usarse aditivos para controlar o reducir la dispersión.

Asegúrese de que la aplicación sea uniforme. Para evitar la aplicación en surcos, irregular o encimada, utilice dispositivos de señalización apropiados.

Mantenimiento de aviones

Al final de cada día de trabajo, lave muy bien el avión, especialmente el tren de aterrizaje, para quitar los residuos de este producto que se acumulan durante el rocío o por derrames. EL CONTACTO PROLONGADO DE ESTE PRODUCTO CON PARTES DE ACERO SIN REVESTIMIENTO PUEDE CAUSAR CORROSIÓN Y POSIBLEMENTE QUE LAS PARTES FALLEN. LA PARTE MÁS SUSCEPTIBLE ES EL TRENO DE ATERRIZAJE. Es posible prevenir la corrosión recubriendo las partes con pintura orgánica que cumpla con las especificaciones aeroespaciales MIL-C-38413.

MANEJO DE LA DISPERSIÓN DEL ROCÍO AÉREO

Deben seguirse los siguientes requerimientos de manejo de la dispersión para minimizar el movimiento de esta fuera del objetivo durante la aplicación aérea. Estos requisitos no se aplican para aplicaciones de forestación.

1. La distancia de la boquilla más externa en el brazo no debe exceder 3/4 del largo de la envergadura o rotor.
2. Las boquillas deben siempre apuntar hacia atrás, paralelas a la corriente de aire, nunca hacia abajo más de 45 grados. En los estados que tengan reglamentos más estrictos, deberán observarse estos.

Importancia del tamaño de las gotas

La forma más eficaz de reducir la posibilidad de dispersión es aplicar en gotas grandes. La mejor estrategia de manejo de la dispersión es la aplicación de las gotas más grandes que provean suficiente cobertura y control. La aplicación de gotas más grandes reduce la posibilidad de dispersión, pero no la evitará si la aplicación se hace de forma incorrecta o bajo condiciones ambientales desfavorables, como por ejemplo con viento, altas temperaturas y baja humedad y/o condiciones de inversión como se describe más adelante.

Control del tamaño de las gotas

- **Volumen:** Use boquillas de velocidad de flujo alta para aplicar el mayor volumen de rocío práctico. Las boquillas con mayores velocidades de flujo producen gotas más grandes.
- **Presión:** Opere a una presión de rocío que esté cerca del extremo más bajo del rango indicado para la boquilla. La presión más alta reduce el tamaño de la gota y no mejora la penetración de la cobertura. Cuando sean necesarias velocidades de flujo mayores, use boquillas con mayor velocidad de flujo en lugar de aumentar la presión.
- **Cantidad de boquillas:** Utilice la cantidad mínima de boquillas que proporcionen una cobertura uniforme.
- **Orientación de la boquilla:** Si orienta las boquillas de modo que liberen el rocío hacia atrás, en sentido paralelo a la circulación del aire, producirán gotas más grandes que si las orienta de otro modo. Cuanto más desviadas estén del plano horizontal, tanto más pequeñas serán las gotas y tanto mayor el potencial de dispersión.
- **Tipo de boquilla:** Utilice un tipo de boquilla diseñado para la aplicación deseada. Con la mayoría de los tipos de boquillas, cuanto menor sea el ángulo de rocío tanto mayor serán las gotas. Considere el uso de boquillas de poca dispersión. Las boquillas de chorro sólido orientadas completamente hacia atrás producen gotas más grandes que otros tipos de boquillas.
- **Longitud del brazo:** En algunos esquemas de uso, la reducción de la longitud efectiva del brazo a menos de 3/4 de la envergadura o de la longitud del rotor puede reducir la dispersión aún más sin reducir el ancho de la franja.
- **Altura de la aplicación:** Las aplicaciones deben realizarse a una altura de 10 pies o menos por encima de la copa de las plantas más grandes, a menos que se requiera mayor altura por razones de seguridad del avión. Realizar las aplicaciones a la menor altura que sea segura reduce la exposición de las gotas a la evaporación y el viento.

Ajuste de franja

Cuando la aplicación se lleve a cabo ante viento lateral, la franja de aspersión se desplazará a favor del viento. Por ello, en los extremos con o contra el viento del campo, el aplicador debe compensar este desplazamiento ajustando la trayectoria del avión contraria al viento. La distancia de ajuste de la franja debe aumentar, cuando aumenta la posibilidad de arrastre (mayor viento, gotitas más pequeñas, etc.).

Viento

El potencial de dispersión es menor cuando la velocidad del viento es de 2 a 10 millas por hora. Sin embargo, muchos factores, incluyendo el tamaño de las gotas y el tipo de equipo, determinan la posibilidad de dispersión a una velocidad determinada. Se debe evitar la aplicación cuando la velocidad del viento está por debajo de 2 millas por hora debido a los cambios de dirección del viento y la alta posibilidad de inversión. NOTA: El terreno local puede influir en los patrones de viento. Cada aplicador debe conocer los patrones de vientos locales y cómo éstos afectan la dispersión.

Temperatura y humedad

Cuando se realizan aplicaciones con humedad relativa baja, fije el equipo para que produzca gotas más grandes para compensar por la evaporación. La evaporación de gotas es más grave cuando las condiciones son calurosas y secas.

Inversiones de temperatura

Este producto no debe aplicarse durante una inversión de temperatura debido a que la posibilidad de dispersión es alta. Las inversiones de temperatura restringen la mezcla de aire vertical, lo que causa que pequeñas gotas permanezcan suspendidas en una nube concentrada. Esta nube puede moverse en direcciones no predecibles debido a los vientos variables leves que son comunes durante las inversiones. Las inversiones de temperatura están caracterizadas por temperaturas en aumento con la altitud y son comunes en las noches con cobertura de nubes limitada y poco o ningún viento. Comienzan a formarse cuando se mete el sol y a menudo continúan en la mañana. Su presencia puede indicarse por niebla en el suelo; sin embargo, si la niebla no está presente, las inversiones también pueden identificarse por el movimiento del humo desde una fuente del suelo o por el generador de humo de un avión. El humo en capas que se mueve lateralmente en una nube concentrada (bajo condiciones de poco viento) indica una inversión, mientras que el humo que se mueve hacia arriba y se disipa rápidamente indica buena mezcla de aire vertical.

Áreas susceptibles

Este producto solo se debe aplicar cuando la posibilidad de dispersión hacia zonas adyacentes susceptibles que no sean el objetivo (por ejemplo, áreas residenciales, hábitat conocido de especies amenazadas o en peligro de extinción, cultivos que no sean el objetivo) sea mínima (por ejemplo, cuando el viento sopla lejos de las áreas susceptibles).

Limitaciones estatales específicas de la aplicación aérea

LIMITACIONES DE LA APLICACIÓN AÉREA SOLAMENTE EN CALIFORNIA

NO aplique este producto usando equipo de aplicación aérea en áreas residenciales.

EVITE LA DISPERSIÓN – NO APLIQUE CUANDO HAYA VIENTO CON RÁFAGAS O BAJO OTRAS CONDICIONES QUE FAVOREZCAN LA DISPERSIÓN. LA DISPERSIÓN DE ESTE PRODUCTO EN CUALQUIER VEGETACIÓN QUE NO SEA EL OBJETIVO DE LA APLICACIÓN PUEDE CAUSAR DAÑOS. PARA EVITAR DAÑOS A LA VEGETACIÓN ADYACENTE DESEADA, USE EL EQUIPO DE APLICACIÓN AÉREA CORRECTO CON LAS BOQUILLAS APROPIADAS Y MANTENGA ZONAS DE TRANSICIÓN ADECUADAS.

Siga las siguientes instrucciones al hacer aplicaciones aéreas cerca de cultivos que no sean el objetivo, vegetación anual deseable o vegetación perenne deseable después de echar brotes y antes de la caída total de las hojas.

1. No aplique este producto a menos de 100 pies de la vegetación deseable o los cultivos que no son el objetivo.
2. Si está soplando un viento de hasta 5 millas por hora HACIA la vegetación deseable o los cultivos que no son el objetivo, no aplique este producto a menos de 500 pies de los cultivos o vegetación deseable.
3. Si están soplando vientos de entre 5 y 10 millas por hora HACIA la vegetación deseable o los cultivos que no son el objetivo, puede que se necesite una zona de transición de más de 500 pies para proteger los cultivos o vegetación deseable.
4. No aplique este producto usando equipo de aplicación aérea cuando soplen vientos de más de 10 millas por hora.

5. No aplique este producto usando equipo de aplicación aérea cuando existan condiciones de inversión.

Al mezclar en tanque este producto con 2,4-D, solo se pueden utilizar formulaciones de 2,4-D amina con equipo de aplicación aérea en California. Las mezclas de tanque de este producto con formulaciones de 2,4-D amina se pueden aplicar por aire en California únicamente en sistemas de labranza reducida o campos con barbecho y para renovación de pastura.

Este producto, al ser mezclado en tanques con dicamba, no se puede aplicar por aire en el estado de California.

LIMITACIONES ADICIONALES PARA LA APLICACIÓN AÉREA SOLAMENTE EN EL CONDADO DE FRESNO, CALIFORNIA

Siempre lea y siga las instrucciones de la etiqueta y las declaraciones preventivas para todos los productos usados en la aplicación aérea.

La siguiente información aplica solo del 15 de febrero al 31 de marzo dentro de los siguientes límites del Condado de Fresno, California:

Norte: Frontera del Condado de Fresno
Sur: Frontera del Condado de Fresno Este: Autopista estatal 99
Oeste: Frontera del Condado de Fresno

Respete las siguientes instrucciones para minimizar el movimiento fuera del lugar durante la aplicación aérea de este producto. Minimizar el movimiento fuera del lugar es responsabilidad del cultivador, el Asesor en control de plagas y el encargado de la aplicación aérea.

Instrucciones por escrito

El encargado de la aplicación o su representante TIENEN que presentar instrucciones por escrito al Comisionado de Agricultura del Condado de Fresno 24 horas antes de la aplicación. Estas instrucciones por escrito TIENEN que indicar la proximidad de los cultivos en los alrededores y que se han cumplido las condiciones de esta etiqueta y de todas las etiquetas de los fabricantes de los productos.

Capacitación y equipo del encargado de la aplicación aérea

La aplicación aérea de este producto se limita a los pilotos que hayan completado con éxito un programa de capacitación para la aplicación aérea de herbicidas aprobado por el Comisionado de Agricultura del Condado de Fresno y el Departamento de Regulación de Pesticidas de California. Todos los aviones tienen que ser inspeccionados, revisados en vuelo y certificados por una organización aprobada por el Comisionado de Agricultura del Condado de Fresno. Pruebe y calibre el equipo de rociado a intervalos suficientes para garantizar que se estén aplicando las proporciones adecuadas de herbicidas y adyuvantes durante el uso comercial. El encargado de la aplicación tiene que documentar dichas pruebas y calibraciones. Una demostración de desempeño en una organización aprobada por el Comisionado de Agricultura del Condado de Fresno constituye documentación, además de otros registros por escrito que muestren cálculos y medidas de los parámetros de vuelo y rociado aceptables para el Comisionado de Agricultura del Condado de Fresno.

Aplicaciones de noche – No aplique este producto por aire más de 30 minutos antes del amanecer ni más de 30 minutos después de la puesta del sol sin autorización previa del Comisionado de Agricultura del Condado de Fresno.

Para obtener información adicional sobre la aplicación aérea adecuada de este producto en el Condado de Fresno llame al (800) 332-3111.

8.3 Equipo de aplicación terrestre

Aplique este producto en las proporciones apropiadas como se especifica en esta etiqueta en 3 a 40 galones de agua por acre cuando se realizan aplicaciones al voleo usando equipos de aplicación terrestre, a menos que se indique de otro modo en esta etiqueta, en las etiquetas complementarias separadas o en las Fichas Técnicas que se publican para este producto. A medida que aumenta la densidad de las malezas, aumente el volumen de rociado hacia el extremo superior dentro de este rango para conseguir una cobertura completa. Use boquillas que eviten generar una niebla fina. Para obtener mejores resultados con el equipo de aplicación terrestre, use boquillas tipo abanico plano. Compruebe la distribución uniforme del patrón de las gotas del rociado.

8.4 Rociadores manuales

Al usar un rociador de mano, aplique soluciones de rociado de este producto de manera completa y uniforme al follaje de la vegetación objetivo, usando un espectro de gotas gruesas y técnica de rociado para mojar; no rocie hasta el punto de escorrentamiento. Consulte la sección "MALEZAS CONTROLADAS" de esta etiqueta para conocer la concentración correcta de este producto en la solución de rociado y el momento de aplicación para controlar malezas específicas, árboles, enredaderas y matorrales leñosos.

Para el control de malezas anuales, aplique cuando las malezas están pequeñas y antes de la formación de inflorescencias o brotes. Para el control de malezas perennes, árboles, enredaderas y matorrales leñosos, aplique después de la floración y antes de la caída de hojas y el color otoñal.

Al hacer una aplicación de rociado dirigido a bajo volumen a malezas anuales y perennes, árboles, enredaderas y matorrales leñosos usando un rociador de mano, asegúrese de rociar por lo menos de 50 a 75 por ciento del follaje o la mitad superior de cada planta no deseada. Si se usa una boquilla de chorro recto, comience la aplicación en la parte superior de la planta objetivo y rocie de arriba hacia abajo con un movimiento lateral en zigzag. Para asegurar una cobertura uniforme y completa, rocie ambos lados de los matorrales leñosos grandes o altos, árboles y enredaderas o cuando el follaje es espeso y denso o hay varios brotes. Para obtener mejores resultados en los árboles, enredaderas y matorrales leñosos, aplique a la vegetación en crecimiento activo después de la expansión completa de las hojas y la floración, antes de la caída de las hojas y el color de otoño.

La siguiente tabla resume varios métodos de aplicación foliar usando un rociador de mochila con una técnica de rociado dirigido a bajo volumen o rociado para mojar y una aplicación con rociador de alto volumen usando equipo de aplicación a mano para el control total o parcial de malezas herbáceas, árboles, enredaderas y matorrales leñosos listados en la sección "MALEZAS CONTROLADAS" de esta etiqueta.

Método de aplicación	Concentración de solución de rociado	Volumen de rociado
Pistola de mano o rociador de mochila	0.5 a 1.5% por volumen	Técnica de rociado para mojar
Rociado dirigido a bajo volumen (mochila)	4 a 8% por volumen	15 a 25 galones por acre
Rociado modificado de alto volumen	1.5 a 3% por volumen	40 a 60 galones por acre

La aplicación de rociado dirigido a bajo volumen con un rociador de mochila funciona mejor cuando se aplica a las malezas y matorrales con menos de 10 pies de alto. Para las malezas y matorrales más altos, una pistola de mano de alto volumen puede modificarse reduciendo el tamaño de la boquilla y la presión de rociado para producir una aplicación modificada de rociado dirigido de alto volumen.

8.5 Equipo de aplicación selectiva

El equipo de aplicación selectiva permite que este producto se aplique a las malezas que crecen cerca de cultivos o de otra vegetación deseable sin matar la vegetación deseable. El equipo de aplicación selectiva debe evitar todo contacto de la solución herbicida con la vegetación deseable y operarse sin filtración de rocíos de niebla, derrames o goteo de la solución herbicida.

EVITE EL CONTACTO DE ESTE HERBICIDA CON LA VEGETACIÓN DESEABLE. El contacto de este producto con la vegetación deseable podría causar daños o la destrucción de la planta. Hasta el grado que sea compatible con la legislación pertinente, este daño será responsabilidad exclusiva de la persona encargada de la aplicación del producto.

Este producto puede diluirse en agua y aplicarse usando rociadores de recirculación, rociadores con pantalla, rociadores con campana, aplicadores con enjador o barras de esponja, a las malezas especificadas en esta etiqueta que crecen en cualquier sitio acuático o terreno de cultivo no alimentario indicado en esta etiqueta, donde sea posible. Este producto también puede usarse con rociadores equipados con tecnología de sensor óptico de malezas. Este producto también puede aplicarse con otro equipo selectivo como los inyectores de tallo sencillos o huecos, inyectores de árboles, aplicadores con enjador para aplicaciones en tallos cortados y tocones cortados y en botellas rociadoras para aplicaciones en tallos cortados, tocones cortados y chorro para controlar malezas de tallo largo, matorrales, árboles y enredaderas indicados en esta etiqueta.

Rociador de recirculación

Los rociadores de recirculación dirigen la solución de rociado hacia los tipos de malezas que crecen sobre vegetación deseable, mientras que la solución de rociado que no ha sido interceptada por las malezas se recoge y se retorna al tanque para volverla a usar. Un rociador de recirculación puede usarse para aplicar soluciones de rociado de este producto a las malezas indicadas en esta etiqueta en cualquier sitio acuático o terreno sin cultivo descrito en esta etiqueta.

Rociadores con pantalla y con campana

Un rociador con pantalla dirige la solución herbicida a las malezas objetivo mientras protege la vegetación deseable de entrar en contacto con el rociado herbicida mediante una pantalla o material impermeable. Use boquillas que aseguren una cobertura uniforme de toda el área tratada. Mantenga las pantallas debidamente colocadas a fin de proteger la vegetación deseada.

Un rociador con campana es un tipo de rociador con pantalla en el que el rociado está totalmente encerrado, y que incluye parte superior, laterales, parte frontal y posterior, de modo que protege la vegetación deseable de la solución de rociado.

Este producto puede diluirse con agua y aplicarse, a menos que se indique lo contrario, mezclado con un surfactante, usando un rociador con pantalla o con campana a las malezas indicadas en esta etiqueta que crecen en cualquier sitio acuático o terreno sin cultivo descrito en esta etiqueta, donde sea posible, y entre hileras de plantas (en medio de las hileras) en cualquier sistema de cultivo indicado en esta etiqueta.

Coloque correctamente la campana para proteger la vegetación deseable. Asegúrese de que la campana es capaz de encerrar completamente el patrón de rociado. De ser necesario cuando lo aplique alrededor de cultivos en camas elevadas, extienda hacia abajo las solapas frontal y posterior del rociador con campana para llegar a la tierra en surcos profundos.

Los rociadores con campana deben ser configurados y operados de manera que reduzcan al mínimo el rebote, y eviten que sea necesario levantar la campana de la superficie de la tierra en cualquier momento. Si la campana se levanta, pueden escapar partículas de rociado y hacer contacto con el cultivo o con otra vegetación

deseable, causándole daño o destrucción. Evite operar este equipo en terreno irregular o en declive, donde la campana de rocío puede levantarse de la superficie del suelo.

Utilice campanas diseñadas para reducir al mínimo el escurrimiento o goteo excesivo por la parte interior de la campana, tales como una única boquilla en abanico de baja presión y poca dispersión con un ángulo de rocío de 80 a 95 grados, colocada en la parte central superior de la campana, con un volumen de rocío de 20 a 30 galones por acre.

Los siguientes procedimientos ayudarán a reducir las posibilidades de daño a la vegetación deseable cuando se usa un rociador con campana:

- Operé el rociador con la campana sobre el terreno o casi rozando la superficie del terreno.
- Deje una franja de al menos 8 pulgadas sin tratar sobre la hilera del surco. (Por ejemplo, si una hilera del cultivo tiene un ancho de 38 pulgadas, use una campana de rocío con un ancho máximo de 30 pulgadas).
- Trabaje a una velocidad terrestre no mayor de 5 millas por hora para minimizar el rebote del rociador con campana.
- Aplique cuando la velocidad del viento sea de 10 millas por hora o menos.
- Utilice boquillas de poca dispersión que ofrecen cobertura uniforme dentro del área de aplicación.

Puede causar daños al cultivo o a otra vegetación deseable si se aplica al follaje de las malezas que tienen contacto directo con la vegetación deseable. No aplique este producto si las hojas de la vegetación deseable crecen en contacto directo con las malezas. Las gotas, la niebla, la espuma o las salpicaduras de la solución herbicida que se depositan en la vegetación deseable pueden causar decoloración, atrofia o destrucción.

Aplicador con enjugador

El aplicador con enjugador es un dispositivo que pasa físicamente este producto o soluciones de este producto directamente a la maleza o los tocónes cortados. Puede usarse cualquier dispositivo manual que sea capaz de pasar físicamente este producto o soluciones de este producto directamente en la maleza objetivo o tocón, como por ejemplo una brocha de pintor.

Un aplicador con enjugador mecánico, como una barra de esponja o mecha que pueda llevarse por un campo por encima de un cultivo u otra vegetación deseable para controlar las malezas que son más altas que la vegetación deseable, debe estar diseñado, mantenerse y operarse de tal manera que evite que la solución herbicida entre en contacto con la vegetación deseable.

Los aplicadores con enjugador pueden usarse sobre los cultivos alimentarios ÚNICAMENTE si su uso sobre ese cultivo está específicamente permitido en esta etiqueta o en las etiquetas complementarias que se publican por separado para este producto.

Al usar un aplicador con enjugador mecánico, ajuste la altura del aplicador para asegurar el contacto adecuado con las malezas, de manera que el punto de contacto del enjugador esté al menos 2 pulgadas por encima del cultivo o la vegetación deseable. Se obtienen mejores resultados cuando una mayor cantidad de maleza entra en contacto con la solución herbicida y las malezas tienen por lo menos 6 pulgadas de altura más que la vegetación deseable. Las malezas que no entran en contacto con la solución herbicida no se afectarán. El contacto puede ser insuficiente cuando las malezas crecen en macizos densos, en las áreas de infestaciones severas de malezas o cuando la altura de las malezas varía considerablemente. En estas situaciones, puede ser necesaria más de una aplicación de este producto.

Opere los aplicadores con enjugador a una velocidad terrestre no mayor de 5 millas por hora. Se puede mejorar el rendimiento en zonas infestadas con muchas malezas si se reduce la velocidad, lo que dará más tiempo para volver a saturar el enjugador con la solución herbicida y más tiempo de contacto del enjugador con la maleza. Se pueden obtener mejores resultados con un aplicador con enjugador si se hacen dos aplicaciones en direcciones opuestas del campo.

Mantenga limpias las superficies del enjugador.

Las gotas, la niebla, la espuma o las salpicaduras de la solución herbicida que se depositan en la vegetación deseable pueden causar decoloración, atrofia o destrucción. Evite las filtraciones o el goteo en la vegetación deseable. Tenga en cuenta que en terreno en declive la solución herbicida puede cambiar de lugar, goteando en el extremo inferior y secando el enjugador en el extremo superior del aplicador.

No aplique este producto con un aplicador con enjugador cuando las malezas estén mojadas.

Agregue un surfactante no iónico a una concentración de 10 por ciento por volumen de la solución total del aplicador (un galón de surfactante por cada 10 galones de solución) para usar en un aplicador con enjugador. Consulte la sección "MEZCLA" de esta etiqueta para obtener información adicional sobre el uso de surfactantes.

Para aplicadores con barra de esponja o mecha: aplique soluciones en un rango entre 33 y 75 por ciento de este producto por volumen en agua.

Para aplicadores de panel: aplique soluciones en un rango entre 33 y 90 por ciento de este producto por volumen en agua.

Mezcle solamente la cantidad de este producto que se usará durante el período de un día, debido a que el uso de soluciones de días anteriores puede reducir el efecto del producto.

Lave las piezas del enjugador inmediatamente después de utilizar este producto enjuagando con una gran cantidad de agua.

Inyectores de tallo sencillos y huecos

Se puede obtener el control de ciertas malezas indicadas en la sección "MALEZAS CONTROLADAS" inyectando este producto concentrado o soluciones de este producto directamente en la maleza objetivo. Asegúrese de que el inyector de mano que se use para esta aplicación sea capaz de rociar con precisión el volumen especificado en la etiqueta. Al inyectar los tallos, el uso total combinado de este producto no debe exceder 8 cuartos de galón por acre por año. A 5 mililitros de producto concentrado (sin diluir) por tallo, 8 cuartos de galón tratarán aproximadamente 1500 tallos por acre por año. La cantidad de tallos que pueden tratarse por acre variará dependiendo del volumen de inyección y de la concentración de este producto en la solución de aplicación.

8.6 Sistemas por inyección

Este producto puede usarse con sistemas de rocío por inyección, ya sean aéreos o terrestres, como concentrado líquido o diluido antes de inyectarlo en el chorro de rocío. No mezcle este producto concentrado con concentraciones de otros productos sin diluir cuando use los sistemas por inyección, a menos que se indique lo contrario. Para usar este producto en sistemas por inyección, se requiere una concentración de surfactante no iónico de 0.5% o más en el chorro de rocío.

8.7 Aplicador por goteo controlado (CDA)

La cantidad de este producto aplicada por acre con el aplicador por goteo controlado (CDA) no puede ser menos que la proporción indicada en esta etiqueta cuando se aplica con un equipo al voleo convencional.

El aplicador por goteo controlado produce un patrón de rocío que es difícil de ver. Debe tener sumo cuidado de no rociar o hacer contacto por dispersión con el follaje o con cualquier otro tipo de vegetación deseable, ya que esto puede causar daño o la destrucción de la planta.

9.0 SITIOS DE USO ACUÁTICO Y TERRESTRE

Este producto puede utilizarse de acuerdo con las instrucciones de uso en esta etiqueta para controlar malezas, árboles, enredaderas y matorrales leñosos indicados en esta etiqueta que crezcan en ambientes acuáticos o en cualquier terreno descrito en esta etiqueta.

9.1 Sitios acuáticos

Este producto puede usarse para controlar malezas, matorrales, árboles y enredaderas emergidas en todos los cuerpos de agua superficial fresca y salobre, fluyentes, estancados o transitorios. Estos cuerpos de agua incluyen lagos, ríos, arroyos, estanques, estuarios, diques de arroz, rezumaderos, acequias, canales, represas, tierras pantanosas e instalaciones para tratamiento de aguas usadas. Este producto puede usarse también para controlar malezas en zonas intermareales por debajo del nivel promedio de la marea alta y en terrenos donde pueda haber cuerpos de agua y una zona de transición que asegurará que un rocío excesivo del agua no se puede mantener.

Al aplicar soluciones de rocío de este producto en sitios acuáticos o cerca de estos, debe usarse un surfactante no iónico indicado para uso con herbicidas y aprobado para aplicación directa a los cuerpos de agua. Consulte la sección "MEZCLA" de esta etiqueta para obtener más información sobre el uso de surfactantes con este producto.

Antes de usar este producto para el control de malezas acuáticas o para control terrestre cerca de sitios acuáticos, lea cuidadosamente la siguiente información.

- Este producto no controla plantas que estén completamente sumergidas o que tienen la mayoría de su follaje debajo del agua.
- No hay restricciones al uso de agua para riego, recreación o fines domésticos después de la aplicación directa de este producto a plantas acuáticas emergidas.
- Consulte con la principal agencia reguladora de pesticidas de su estado, la agencia estatal de pesca y vida silvestre y/o la autoridad para el control de las aguas antes de aplicar este producto a la vegetación que crezca en aguas públicas para determinar si se requiere un permiso.
- No aplique este producto directamente al agua dentro de 0.5 millas aguas arriba de una toma activa de agua potable en corrientes de agua (esto es, ríos, arroyos, etc.) o dentro de 0.5 millas de una toma activa de agua potable en un cuerpo de agua estancada, como un lago, estanque o represa. Para aplicaciones acuáticas cerca y dentro de 0.5 millas de una toma activa de agua potable, la toma tiene que cerrarse por un período mínimo de 48 horas después de la aplicación. La toma de agua puede abrirse antes de las 48 horas si el nivel de glifosato en el agua de la toma está por debajo de 0.7 partes por millón según lo determina un análisis de laboratorio. Estas aplicaciones acuáticas pueden hacerse ÚNICAMENTE en aquellos casos donde existen fuentes de agua alternas o embalses que permitan cerrar una toma activa de agua potable por un período mínimo de 48 horas después de la aplicación. Esta restricción NO aplica al rocío excesivo accidental e intermitente del agua en sitios de uso terrestre.
- Para alcanzar el control máximo de malezas en zanjas secas, aplique este producto 1 día después de interrumpir el suministro de agua para asegurar la aplicación en las malezas con crecimiento activo y deje transcurrir 7 días o más después del tratamiento para volver a restaurar el agua.
- Puede ser necesario más de una aplicación de este producto para el control de matas de vegetación flotante. Evite que la lluvia o el oleaje levantado por los botes laven este producto del follaje en un plazo de 4 horas después de la aplicación. Espere por lo menos 24 horas antes de volver a aplicar este producto a la misma vegetación.
- La aplicación de este producto a cuerpos de agua en movimiento debe hacerse mientras se mueve contracorriente para evitar la concentración del herbicida en el agua.
- Al aplicar en las márgenes de cuerpos de agua, evite superponer más de un pie dentro del agua.
- No aplique este producto a cuerpos de agua donde no existan malezas emergidas.
- Si aplica este producto a más del 20 por ciento del área total de un cuerpo de agua, no aplique más de 3.75 cuartos de galón por acre en una sola aplicación al voleo. Si aplica a menos del 20 por ciento del área total de un cuerpo de agua, puede aplicar cualquier proporción indicada en esta etiqueta. Esta restricción de proporción en aplicación única no aplica a cruces de corrientes de agua en servidumbres de paso de servicios públicos.
- Cuando la infestación de malezas emergidas cubre la superficie total de un cuerpo de agua en un embalse o represa, aplique este producto a la vegetación emergida en franjas para evitar la pérdida de oxígeno en el agua causada por la vegetación en descomposición. La pérdida de oxígeno en el agua puede dar lugar a un aumento en la mortalidad de los peces.

MEZCLAS DE TANQUE: Este producto se puede aplicar en una mezcla de tanque con uno o más de los siguientes productos para mejorar el control de malezas acuáticas, árboles, enredaderas y matorrales leñosos en sitios acuáticos, siempre que el producto usado esté registrado para uso acuático. Consulte las etiquetas de cada producto usado en la mezcla de tanque para conocer los usos aprobados y las proporciones de aplicación. Lea y siga siempre las indicaciones de las etiquetas de cada producto utilizado en la mezcla.

Clipper; Garlon 3A Specialty; Habitat; 2,4-D amina; imazapyr; flumioxazin; triclopyr

9.2 Sitios terrestres

Este producto puede utilizarse de acuerdo con las instrucciones de uso en esta etiqueta para controlar malezas, árboles, enredaderas y matorrales leñosos indicados en esta etiqueta en cualquier terreno descrito en esta etiqueta.

Este producto puede utilizarse para controlar malezas, árboles, enredaderas y matorrales leñosos en mantenimiento de jardines, terrenos mejorados y sin mejorar, céspedes y en los alrededores de plantas ornamentales en zonas industriales, comerciales y residenciales, incluyendo aeropuertos, complejos de viviendas, chaparrales, bordes de acequias, caminos de entrada de automóviles, zanjas y canales secos, ranchos, bordes de cercas, bosques, campos de golf, invernaderos, madereras, fábricas, zonas municipales, áreas naturales, viveros, complejos de oficinas, lechos ornamentales, parques, estacionamientos, pasturas, patios de tanques de petróleo, instalaciones de bombeo, ferrocarriles, tierras de pastoreo, áreas recreativas, áreas residenciales, bordes de carretera, escuelas, cobertizos, sitios para la producción de céspedes, complejos deportivos, almacenes, subestaciones, servidumbres de paso de servicios públicos, sitios de servicios públicos, áreas de almacenamiento, parcelas para alimento de la vida silvestre y áreas de preservación de la vida silvestre.

Este producto puede utilizarse para el control no selectivo de vegetación no deseada en cualquier sitio indicado en esta etiqueta para aplicación en recortes y bordes alrededor de objetos, incluyendo alrededor de los cimientos de edificios, áreas donde se guardan equipos, y árboles, a lo largo de cercas, y para eliminar las malezas no deseadas que crecen cerca de lechos de arbustos establecidos y plantaciones ornamentales. Este producto también puede utilizarse para la completa eliminación de la vegetación en un terreno antes de sembrar plantas ornamentales, flores o césped (en tepes o semillas), y antes de desarrollar terrenos, incluso antes de comenzar proyectos de construcción o de cubrir con asfalto u otro material para la construcción de caminos. Se pueden repetir las aplicaciones de este producto cuando sea necesario para mantener el terreno limpio de malezas, hasta un máximo de 8 cuartos de galón por acre por año.

Este producto puede utilizarse para el establecimiento y mantenimiento de cortafuegos, para establecer perímetros y pantallas contra fuegos, junto a caminos para bomberos y para facilitar las prácticas de quema recomendadas en cualquier sitio descrito en esta etiqueta.

Este producto también puede utilizarse para el control de malezas o para regular el crecimiento en las plantaciones de árboles de Navidad, huertos de cítricos, ranchos, viveros de producción, cañaverales de azúcar, plantaciones de césped y sitios de producción de semillas de céspedes.

Este producto requiere la adición de un surfactante no iónico a la solución de rocío indicada para aplicación herbicida. Consulte la sección "MEZCLA" de esta etiqueta para obtener más información sobre el uso de surfactantes con este producto.

A menos que se indique lo contrario, la aplicación de este producto se puede hacer de acuerdo con las instrucciones de uso en las secciones que siguen en cualquiera de estos sitios, usando cualquier método de aplicación descrito en esta etiqueta para controlar las malezas, árboles, enredaderas y matorrales leñosos indicados en la sección de "MALEZAS CONTROLADAS" de esta etiqueta.

10.0 INFORMACIÓN ADICIONAL SOBRE MANEJO DEL LUGAR

Las siguientes secciones contienen información adicional sobre uso específicamente relacionada con el uso en ciertas zonas. A menos que se indique lo contrario, cualquier aplicación de este producto descrita en la sección "MALEZAS CONTROLADAS" o en cualquier otra sección de esta etiqueta se puede hacer en las zonas de uso descritas en las secciones que siguen, cuando proceda, usando cualquier método de aplicación descrito en esta etiqueta que sea apropiado.

10.1 Manejo de bosques, árboles de madera y árboles de Navidad

Este producto puede usarse para el control total o parcial de matorrales leñosos, árboles y malezas herbáceas en cualquier zona de árboles, incluyendo bosques, plantaciones de árboles de Navidad y viveros dedicados a la silvicultura y la producción, usando cualquier método de aplicación indicado en esta etiqueta. Vea la sección "MALEZAS CONTROLADAS" de esta etiqueta para conocer las proporciones de aplicación y las instrucciones de uso específicas.

A menos que se indique lo contrario, este producto requiere que se agregue a la mezcla de rocío un surfactante no iónico aprobado para el uso deseado en el sitio de la aplicación. El uso de este producto sin un surfactante dará lugar a un rendimiento inferior. Consulte la sección "MEZCLA" de esta etiqueta para obtener más información sobre el uso de surfactantes con este producto.

IMPORTANTE: ALGUNOS SURFACTANTES PUEDEN CAUSAR DAÑOS A LOS ÁRBOLES SI SE APLEAN DIRECTAMENTE A ALGUNAS ESPECIES. LEA Y ENTIENDA COMPLETAMENTE TODOS LOS USOS APROBADOS, LAS PRECAUCIONES Y LIMITACIONES DEL SURFACTANTE ANTES DE USARLO.

Manejo de malezas, preparación del terreno

Este producto puede utilizarse para controlar total o parcialmente matorrales leñosos, árboles, enredaderas y malezas herbáceas no deseables indicados en esta etiqueta para preparar el terreno antes de sembrar cualquier especie de árbol, incluyendo árboles de Navidad, árboles de eucalipto y cultivos de árboles híbridos, así como para controlar las malezas en los alrededores de árboles establecidos, para la poda de coníferas y árboles de madera, establecer zonas de reserva de vida silvestre y mantener los caminos en cualquier zona de árboles.

MEZCLAS DE TANQUE: Este producto puede aplicarse en mezcla de tanque con los productos indicados en esta sección para aumentar el espectro de vegetación controlada. Cualquier proporción de aplicación de este producto indicado en esta etiqueta puede usarse en una mezcla de tanque con los siguientes productos para el manejo de la zona de árboles, incluyendo la preparación del terreno, siempre que el producto esté registrado para su uso en el sitio de aplicación y antes de sembrar las especies deseadas. Consulte las etiquetas de cada producto usado en la mezcla de tanque para conocer los usos aprobados y las proporciones de aplicación. Lea y siga todas las instrucciones de uso y las precauciones para cada producto usado, incluyendo las restricciones de intervalos de siembra, si las hay. Use este producto conforme a las precauciones más restrictivas de cada producto en la mezcla.

Arsenal; Herbicida concentrado para aplicadores Arsenal; Chopper; Chopper GEN2; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Landmark; Landmark XP; Oust Extra; Oust XP; imazapyr; metsulfuron methyl; sulfometuron methyl; triclopyr

Para el control de las malezas herbáceas, aplique estos productos en mezcla de tanque en la proporción de aplicación más baja dentro del rango especificado en la etiqueta del producto. Para el control total o parcial de poblaciones densas o para árboles, enredaderas y matorrales leñosos difíciles de controlar, aplique estos productos en una proporción o concentración de solución de rocío más alta dentro del rango dado.

Poda forestal de coníferas, poda de coníferas a mitad de rotación, poda de árboles de madera, mejora del grupo de madera

Este producto puede aplicarse como rocío dirigido usando un rociador manual o cualquier equipo de aplicación selectiva descrito en esta etiqueta para controlar las malezas leñosas y herbáceas y otra vegetación sotobosque no deseada por debajo de la copa de los árboles del cultivo en las plantaciones de coníferas, árboles de madera, árboles de Navidad y viveros ornamentales y de silvicultura para facilitar la poda forestal y el crecimiento de coníferas y árboles de madera.

Este producto también puede aplicarse usando un equipo de aplicación terrestre al voleo o en aplicación en rocío dirigido para la poda forestal a mitad de rotación bajo la copa de los pinos, otras coníferas y árboles de madera.

PRECAUCIONES: Evite el contacto de la dispersión, niebla o gotas del rocío con el follaje, la corteza verde o las raíces no leñosas expuestas de las especies de plantas deseables. Use técnicas de aplicación que eviten o minimicen el contacto de este producto con el follaje de los árboles u otras plantas deseadas a través del contacto directo o del desvío del rocío fuera del objetivo.

Poda de coníferas – Aplicación al voleo

Este producto se puede aplicar ampliamente por encima de la copa de las especies de coníferas indicadas en esta sección, después de la formación de los brotes latentes finales en el otoño o antes de la expansión inicial de los brotes en la primavera, para el control total o parcial o la supresión de las malezas herbáceas y los árboles de madera indicados en la sección "MALEZAS CONTROLADAS" de esta etiqueta para facilitar la poda de estas especies de árboles en viveros, plantaciones y bosques. A menos que se indique lo contrario, aplique únicamente cuando las coníferas lleven establecidas por lo menos una temporada de crecimiento.

PRECAUCIONES: Se puede causar daño a las coníferas si se aplica este producto en proporciones mayores que las recomendadas en esta etiqueta, donde las aplicaciones se superponen, si se realiza la aplicación cuando las coníferas están en crecimiento activo o cuando crecen bajo estrés por sequía, inundaciones, siembra incorrecta o daños por insectos, animales o enfermedades.

Poda de coníferas fuera del sureste de los Estados Unidos

Para la poda de las siguientes especies de coníferas que hayan crecido como mínimo por una temporada de crecimiento en la mayor parte de las áreas fuera del sureste de los Estados Unidos, aplique de 24 a 48 onzas fluidas de este producto por acre en aplicación al voleo por encima de la copa de los árboles de coníferas.

- Abeto Douglas
- Especies de abeto
- Hemlock
- Pinos*
- Secoya de California
- Spruce

* Incluye todas las especies *excepto* pino loblolly, pino amarillo (longleaf), pino shortleaf o pino slash.

Aplique de 24 a 40 onzas líquidas de este producto para la poda de abeto de Douglas, pino y spruce que hayan estado establecidos por solo una temporada de crecimiento (excepto en California).

Para poda de spruce (*Picea spp.*) en Maine, Michigan, Minnesota, New Hampshire y Wisconsin, hasta 2.25 cuartos de galón de este producto se puede aplicar después de la formación de los brotes latentes finales en otoño para controlar las especies de árboles y matorrales leñosos.

PRECAUCIONES: Asegúrese de que las coníferas estén bien endurecidas antes de aplicar este producto. Algunos surfactantes no iónicos pueden dañar los árboles si se aplican ampliamente sobre la copa de hemlock y secoya de California y en grupos mixtos de coníferas. Pruebe el surfactante no iónico antes de usarlo para evitar dañar el árbol.

Poda de coníferas en el sureste de los Estados Unidos

Para la poda de las siguientes especies de coníferas establecidas por más de una temporada de crecimiento en el sureste de los Estados Unidos, aplique de 36 a 60 onzas fluidas de este producto por acre en el otoño con aplicación al voleo por encima de la copa de los árboles. Para la poda de estas especies después de una sola temporada de crecimiento, aplique solo 24 onzas líquidas de este producto por acre.

- Pino blanco del este
- Pino loblolly
- Pino amarillo (Longleaf)
- Pino shortleaf
- Pino slash
- Pino de Virginia

MEZCLAS DE TANQUE: Este producto se puede aplicar para la poda de coníferas en una mezcla de tanque con los siguientes productos para proporcionar un espectro más amplio de control de maleza postemergencia y para el control residual de malezas indicadas en la etiqueta de esos productos. Aplique estas mezclas de tanque solamente sobre la copa de las especies de coníferas que estén aprobadas para este uso para todos los productos en la mezcla. Consulte las etiquetas de cada producto para conocer los usos aprobados y las proporciones de aplicación. Lea y siga todas las instrucciones de uso y las precauciones para cada producto usado. Use este producto conforme a las precauciones más restrictivas de cada producto en la mezcla.

Arsenal; Herbicida concentrado para aplicadores Arsenal; Oust Extra; Oust XP; atrazina; imazapyr; metsulfuron methyl; sulfometuron methyl

Para la poda de abeto Douglas establecido como mínimo por una temporada de crecimiento antes de la formación de brotes a principios de primavera, aplique 24 onzas líquidas de este producto en mezcla de tanque con una proporción apropiada de atrazina. No agregue surfactantes para esta aplicación.

Para la poda herbácea de pino loblolly, pino de Virginia y pino longleaf en la primavera y a principios de verano, aplique de 12 a 18 onzas líquidas de este producto por acre en una mezcla de tanque con una proporción apropiada de Oust Extra u Oust XP.

Fines de verano y otoño después de la formación de brotes

Para la poda de pino jack, pino blanco y spruce blanco, aplique de 24 a 48 onzas líquidas de este producto por acre en mezcla de tanque con una proporción apropiada de Oust Extra u Oust XP que no dañará estas especies de coníferas.

Para la poda de abeto Douglas, aplique de 24 a 36 onzas líquidas de este producto por acre en una mezcla de tanque con una proporción apropiada de Arsenal o Herbicida concentrado para aplicadores Arsenal.

Para la poda de abeto balsam y spruce rojo, aplique 48 onzas líquidas de este producto por acre en una mezcla de tanque con una proporción apropiada de Arsenal o Herbicida concentrado para aplicadores Arsenal.

10.2 Manejo de hábitats de vida silvestre y especies nativas

Este producto puede usarse para controlar vegetación exótica y otra no deseada en áreas naturales y hábitats de vida silvestre, incluyendo riberas y estuarios, tierras de pastoreo y refugios de vida silvestre. Pueden hacerse aplicaciones para permitir la recuperación de especies de plantas nativas o antes de plantar especies nativas deseables, y para aplicaciones similares de control de amplio espectro de la vegetación. Puede hacerse tratamiento localizado, aplicación a tocones cortados, tallos cortados, inyección de tallo, aplicador con enjuguador y todos los demás métodos indicados en esta etiqueta para eliminar de forma selectiva las plantas no deseadas para el manejo y mejora de hábitats.

Este producto también se puede utilizar para eliminar malezas anuales y perennes antes de sembrar parcelas para alimento de la vida silvestre.

Después de aplicar este producto, se puede sembrar cualquier especie de alimento para la vida silvestre o permitir la repoblación natural de la zona con especies nativas. Si debe labrar para preparar un semillero, espere por lo menos 7 días después de la aplicación antes de hacerlo a fin de permitir la absorción adecuada en las partes de la planta que estén bajo tierra.

10.3 Manejo de vivero ornamental y de producción

Todos los usos de este producto descritos en esta etiqueta pueden aplicarse a viveros de plantas usando cualquier método de aplicación descrito.

Este producto puede usarse para limpiar un área de vegetación no deseada antes de sembrar cualquier planta, árbol, arbusto ornamental o de otro tipo.

Este producto también puede utilizarse para controlar malezas que crecen alrededor de especies leñosas ornamentales establecidas, como árbol de la vida, azalea, boj, manzana silvestre, eucalipto, evónimo, abeto, abeto Douglas, jojoba, acebos, lirio, magnolia, arce, roble, álamo blanco o negro, ligustró, pino, abeto picea (spruce) y tejo. Este producto también puede ser utilizado para recortado de bordes alrededor de plantas en macetas y otros objetos en un vivero de plantas.

PRECAUCIONES: Proteja las plantas deseables de la solución de rocío con pantallas o cubiertas de materiales impermeables. Tenga cuidado para evitar que el rocío, la dispersión o la niebla no hagan contacto con el follaje, lo tallos verdes o la corteza inmadura de las especies ornamentales establecidas.

Invernaderos/cobertizos

Este producto se puede usar para controlar las malezas que estén creciendo en o alrededor de los invernaderos y cobertizos.

RESTRICCIONES: La vegetación deseable no debe estar presente durante la aplicación en un invernadero. Apague los equipos de ventilación antes de aplicar este producto dentro de un invernadero o cobertizo y déjelos apagados hasta que la solución aplicada haya secado.

10.4 Manejo de áreas comerciales, residenciales y recreativas

Todas las aplicaciones de este producto descritas en esta etiqueta se pueden usar en áreas comerciales, residenciales y recreativas, incluyendo parques, escuelas y campos de atletismo, usando cualquier método de aplicación descrito en esta etiqueta, incluyendo tratamiento localizado de vegetación no deseada, recorte de bordes alrededor de árboles, cercas, senderos, edificios, aceras, circuitos y otros objetos en estas áreas, para eliminar malezas no deseadas que crecen en lechos ornamentales y de arbustos establecidos, para el manejo y la renovación de céspedes y para eliminar la vegetación de un sitio antes de su desarrollo, incluyendo antes de sembrar un área de flores, plantas ornamentales o césped (en tepes o semillas) o de comenzar proyectos de construcción.

10.5 Manejo de zonas de pasturas

El uso de este producto en pasturas incluye el uso en bahiagrass, bermudagrass, bluegrass, bromé, fescue, guineagrass, kikuyugrass, orchardgrass, pangola grass, ryegrass, Timothy y wheatgrass.

Antes de sembrar, preemergencia, renovación de pasturas

Este producto se puede aplicar antes de sembrar o de que emergan pastos forrajeros o perennes. Consulte la sección "MALEZAS CONTROLADAS" de esta etiqueta para conocer las proporciones de aplicación de este producto para el control de malezas específicas.

RESTRICCIONES: Si la proporción total de aplicación de este producto es 2.25 cuartos o menos por acre, no se requiere período de espera entre el tratamiento y la utilización como alimento o el pastoreo del ganado. Si la proporción es mayor a 2.25 cuartos de galón por acre, retire el ganado doméstico antes de aplicar y espere como mínimo 8 semanas después de la aplicación para utilizar como pastura o para cosechar.

Tratamiento localizado, aplicador con enjuguador

Este producto se puede aplicar en pasturas como tratamiento localizado o por la parte superior de pastos atractivos, utilizando aplicadores con enjuguador para controlar las malezas más altas. Para un mejor control de malezas, retire el ganado doméstico antes de aplicar para permitir suficiente crecimiento de las plantas y espere como mínimo 7 días después de la aplicación antes del pastoreo del ganado o para cosechar como forraje. Vea en la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta las instrucciones adicionales para el empleo de aplicadores con enjuguador.

RESTRICCIONES: Para tratamiento localizado o usando un aplicador con enjuguador, en proporciones de 2.25 cuartos de galón o menos por acre, puede aplicar este producto sobre todo el pasto o en cualquier parte de este. En proporciones de más de 2.25 cuartos de galón por acre, este producto no se puede aplicar sobre más de 10 por ciento del total de la pastura cada vez. Se pueden repetir las aplicaciones en la misma zona con intervalos de 30 días.

Inhibición de malezas en pasturas latentes

Este producto se puede aplicar a pasturas latentes para inhibir el crecimiento competitivo y la producción de semillas de malezas anuales y otra vegetación no deseable. Aplique de 9 a 12 onzas líquidas de este producto por acre usando un equipo de aplicación al voleo en pasturas a finales del otoño después de que los pastos perennes deseables estén latentes o a finales del invierno antes de que los pastos perennes deseables comiencen la actividad e inicien el crecimiento vegetativo.

PRECAUCIONES: Pueden usarse proporciones de aplicación más altas para las malezas difíciles de controlar; sin embargo, las proporciones más altas pueden reducir los grupos. Puede producirse cierta atrofia de los pastos perennes si las aplicaciones al voleo se realizan cuando las plantas están activas.

RESTRICCIONES: No se necesita período de espera entre la aplicación y el pastoreo o para cosechar como forraje. No aplique más de 2.25 cuartos de galón de este producto por acre por año en pastos para pastura, excepto para renovación. Si necesita volver a sembrar debido a una reducción considerable del grupo, no se requiere período de espera después de aplicar este producto antes de sembrar el pasto para pastura indicado al inicio de esta sección; para todos los demás pastos para pastura, espere por lo menos 30 días después de la aplicación para sembrar.

10.6 Manejo de ferrocarriles

Todos los usos de este producto descritos en la sección "MALEZAS CONTROLADAS" o en cualquiera otra de esta etiqueta se pueden utilizar en las zonas de ferrocarriles con cualquier método de aplicación descrito.

Este producto requiere que se agregue a la mezcla de rocío un surfactante no iónico aprobado para el uso deseado en el sitio de la aplicación. Si se va a realizar la aplicación donde los sitios acuáticos puedan ser rociados directamente o rociados en exceso accidentalmente, el surfactante tiene que estar aprobado para uso acuático. El uso de este producto sin un surfactante dará lugar a un rendimiento inferior. Consulte la sección "MEZCLA" de esta etiqueta para obtener más información sobre el uso de surfactantes con este producto.

Este producto se puede aplicar a lo largo de las servidumbres de paso de los ferrocarriles en una proporción de hasta 80 galones de solución de rocío por acre.

Suelo limpio, balastos y bordes, cruces, tratamiento localizado

Este producto se puede usar para mantener el suelo limpio en los balastos y bordes de los ferrocarriles y reducir la necesidad de segar y desbrozar mecánicamente a lo largo de las servidumbres de paso de los ferrocarriles. Se pueden repetir las aplicaciones de este producto si las malezas continúan emergiendo para mantener el terreno limpio, hasta una proporción de aplicación total máxima de 8 cuartos de galón de este producto por acre por año.

MEZCLAS DE TANQUE: Este producto se puede aplicar en una mezcla de tanque con los siguientes productos para un mejor control de árboles y matorrales leñosos en aplicaciones para suelo limpio, balastos y bordes, cruces y tratamiento localizado, así como control de otros matorrales, árboles y enredaderas en zonas de ferrocarriles, siempre que el producto usado esté aprobado para estas aplicaciones. No todos los productos en mezcla de tanque están aprobados para uso acuático. Consulte las etiquetas de cada producto usado en la mezcla de tanque para conocer los usos aprobados y las proporciones de aplicación. Lea y siga siempre las indicaciones de las etiquetas de cada producto utilizado en la mezcla.

Arsenal; Herbicida concentrado para aplicadores Arsenal; Chopper; Chopper Gen2; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Habitat; Hyvar X; Hyvar X-L; Krovar I DF; Oust Extra; Oust XP; Outrider®; Princep 4L; Princep Caliber 90; Princep Liquid; Sahara DG; Scythe; Stalker; Spike 20P Specialty; Spike 80DF Specialty; Telar XP; Transline Specialty; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Vastlan Specialty; 2,4-D; atrazina; bromacil; chlorsulfuron; clopyralid; dicamba; diquat; diuron; hexazinone; imazapyr; metlsulfuron methyl; pelargonic acid; simazine; sulfometuron methyl; sulfosulfuron; tebutiuron; triclopyr

Control de matorrales, árboles y enredaderas

Este producto se puede usar para controlar árboles, enredaderas y matorrales leñosos a lo largo de servidumbres de paso de los ferrocarriles. Aplique de 3 a 8 cuartos de galón de este producto por acre en hasta 80 galones de solución de rocío que contenga 0.5% o más por volumen de un surfactante no iónico como aplicación al voleo usando un rociador con brazo o sin brazo. Aplique una solución de 0.75 a 1.5 por ciento de este producto cuando use un equipo de aplicación de alto volumen con una técnica de rocío para mojar o una solución de 4 a 8 por ciento cuando use rocío dirigido de bajo volumen para tratamiento localizado.

MEZCLAS DE TANQUE: Este producto se puede aplicar en una mezcla de tanque con uno o más de los siguientes productos para mejorar el control de árboles, enredaderas y matorrales leñosos a lo largo de las servidumbres de paso de los ferrocarriles, siempre que el producto esté registrado para su uso en estos sitios. Consulte la etiqueta de cada producto para conocer los sitios aprobados y las proporciones de aplicación.

Arsenal; Herbicida concentrado para aplicadores Arsenal; Chopper; Chopper Gen2; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Habitat; Krenite S Brush Control Agent; Stalker; Telar XP; Tordon 101 Mixture Specialty; Tordon 22K Specialty; Tordon K Herbicide Specialty; Transline Specialty; Vanquish; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Vestlan Specialty; chlorsulfuron; clopyralid; dicamba; fosamine; hexazinone; imazapic; metsulfuron methyl; picloram; triclopyr

Control de malezas en Bermudagrass latente y en crecimiento activo

Este producto se puede usar para controlar total o parcialmente muchas malezas anuales y perennes en bermudagrass latente y en crecimiento activo a lo largo de la servidumbre de paso de los ferrocarriles. Vea la sección "MALEZAS CONTROLADAS" de esta etiqueta para conocer las instrucciones de uso de este producto para el control de malezas en pastos.

10.7 Manejo de tierras de pastoreo

Este producto controla o inhibe muchas malezas anuales que crecen en tierras de pastoreo de pastos perennes de estaciones fría y cálida. Se podría producir una ligera decoloración del pasto deseable, pero este reverdecerá y volverá a crecer en tierra húmeda a medida que desaparezcan los efectos de este producto.

Para controlar la invasión de malezas de pastos anuales en tierras de pastoreo es esencial prevenir la producción de semillas de malezas. La aplicación anual de este producto para eliminar las malezas anuales invasivas antes de que produzcan semillas ayudará a eliminar las semillas de maleza viables del suelo. Se deberá demorar la utilización del área como pastura después de aplicar este producto para permitir que las plantas perennes deseables crezcan, florezcan y vuelvan a producir semillas.

Control de Bromus: Una aplicación al voleo de 9 a 12 onzas líquidas de este producto por acre controlará o inhibirá malezas como downy brome (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), soft chess (*Bromus mollis*), cheatgrass (*Bromus secalinus*), rye (centeno) para cereal y jointed goatgrass en tierras de pastoreo. Para obtener mejores resultados, aplique cuando la mayoría de las plantas de bromus se encuentren en la etapa de floración temprana y antes de que las plantas, incluidas las inflorescencias, cambien de color. Permita el crecimiento secundario de malezas después de las lluvias de primavera para reducir aún más la reserva de semillas en el suelo y alentar la conversión del pasto perenne en lugares con malezas. Aplique este producto en otoño en las zonas donde la humedad en primavera es habitualmente limitada y la germinación de otoño permite el crecimiento de malezas y la reducción de semillas de malezas.

Control de Medusahead: Para controlar o inhibir las plantas de medusahead (*Taeniatherum caput-medusae*), aplique 12 onzas líquidas de este producto por acre en la etapa de 3 hojas. La demora de la aplicación después de esta etapa resultará en un control inferior o inaceptable. El quemado controlado antes de la aplicación de este producto eliminará la capa seca superficial producida por tallos de gramíneas en descomposición lenta. Permita que las malezas broten nuevamente antes de rociar este producto después de haber quemado. Repita la aplicación anualmente para eliminar las semillas de medusahead en el suelo y permitir al pasto perenne deseable repoblar el área.

RESTRICCIONES: No aplique más de 2.25 cuartos de galón de este producto por acre por año en tierras de pastoreo. No utilice sulfato de amonio cuando aplique este producto a pastos de tierras de pastoreo. No se requiere período de espera entre la aplicación de este producto y la utilización como pastura o alimento para el ganado.

10.8 Manejo de lados de carreteras

Todos los usos de este producto descritos en esta etiqueta pueden utilizarse para el manejo de malezas a lo largo de carreteras, incluyendo el control de malezas en bermudagrass y bahiagrass latente y activo, control de malezas a lo largo de bordes y debajo y alrededor de barandas, postes y otros objetos a lo largo del camino, usando cualquier método de aplicación descrito en esta etiqueta. Si se aplica este producto en zonas donde podría rociarse en exceso accidentalmente la solución de rocío en un cuerpo de agua, tiene que usarse un surfactante no iónico aprobado para uso acuático. Consulte la sección "MEZCLA" de esta etiqueta para obtener más información sobre el uso de surfactantes con este producto.

MEZCLAS DE TANQUE: Este producto puede mezclarse en tanque con los siguientes productos para aplicaciones a bordes, barandas, tratamiento localizado y mantener el suelo limpio siempre y cuando estos productos estén aprobados para su uso en dichos sitios. No todos los productos en mezcla de tanque están aprobados para uso acuático. Consulte las etiquetas de cada producto para conocer los usos aprobados y las proporciones de aplicación.

AAtrex 4L; AAtrex Nine-O; Banvel; Barricade 65WG; Chopper; Chopper Gen2; Crossbow; Direx 4L; Escort XP; Endurance; Formula 40; Gallery 75 Dry Flowable Specialty; Gallery SC; Garlon 4; Garlon XRT; Hyvar X; Karmex DF; Krenite S Brush Control Agent; Krovar I DF; Landmark; Landmark XP; Oust Extra; Oust XP; Outrider®; Pendulum 3.3 EC; Pendulum AquaCap; Pendimax 3.3; Plateau; Poast; Poast Plus; Princep 4L; Ronstar 50 WSP; Ronstar Flo; Ronstar G; Sahara DG; Surflan AS Specialty; Surflan Flex; Surflan T&O; Surflan Pro; Surflan XL 2G; Telar XP; Tordon K; Vanquish; Vestlan Specialty; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Weedar 64; 2,4-D; atrazina; bromacil; chlorsulfuron; clopyralid; dicamba; diuron; fosamine; hexazinone; imazapic; imazapic; metsulfuron methyl; oryzalin; oxadiazon; pendimethalin; picloram; prodiamine; simazine; sulfometuron; sulfosulfuron; triclopyr

10.9 Manejo de servicios públicos

Este producto se puede usar a lo largo de servidumbres de paso de energía eléctrica, tuberías y líneas telefónicas, así como todos los sitios relacionados con las servidumbres de paso de estos servicios públicos, incluyendo subestaciones, caminos de acceso, ferrocarriles y a lo largo de servidumbres de paso similares en conjunto con servicios públicos, para el tratamiento localizado de vegetación no deseada, recorte lateral,

recorte de bordes alrededor de objetos, control de malezas antes de sembrar plantas ornamentales, flores o césped (en tepes o semillas) en un sitio de servicios públicos, manejo de césped, eliminar malezas no deseadas que crecen en lechos ornamentales o arbustos establecidos, preparar o establecer zonas de reserva de vida silvestre y eliminar la vegetación antes de comenzar proyectos de construcción. Se pueden repetir las aplicaciones de este producto cuando sea necesario para mantener el terreno limpio cuando las malezas siguen emergiendo hasta una proporción de aplicación máxima de 8 cuartos de galón por acre por año.

MEZCLAS DE TANQUE: Este producto se puede mezclar en tanque con los siguientes productos para su uso en áreas de servicios públicos, siempre y cuando el producto esté aprobado para su uso en dichos sitios. No todos los productos en mezcla de tanque están aprobados para uso acuático. Consulte la etiqueta de cada producto para conocer los usos aprobados y las proporciones de aplicación. Para controlar las malezas herbáceas, use una proporción de aplicación o concentración de solución de rocío más baja dentro de los rangos dados para estos productos de mezcla de tanque y aumente la proporción o concentración hacia los extremos más altos de los rangos para controlar grupos densos o árboles, enredaderas y matorrales leñosos difíciles de controlar.

AAtrex 4L; AAtrex Nine-O; Herbicida concentrado para aplicadores Arsenal; Endurance; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XLT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Hyvar XL; Krenite S Brush Control Agent; Krovar I DF; Oust Extra; Oust XP; Outrider®; Plateau; Sahara DG; Surflan AS Agricultural; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Telar XP; Transline Specialty; Vanquish; Velpar DF CU; Velpar DF VU; Velpar L; Velpar L CU; Velpar L VU; Vestlan Specialty; Weedar 64; 2,4-D; atrazina; bromacil; chlorsulfuron; clopyralid; dicamba; diuron; fosamine; hexazinone; imazapic; imazapic; metsulfuron methyl; oryzalin; pendimethalin; prodiamine; simazine; sulfometuron methyl; sulfosulfuron; triclopyr

Asegúrese de que el producto Garlon esté bien mezclado con agua de acuerdo con las instrucciones en la etiqueta antes de agregar este producto a la mezcla de rocío. Continúe agitando al agregar este producto para evitar problemas de compatibilidad de la mezcla de tanque.

Para obtener mejores resultados con el recorte lateral, aplique este producto en una mezcla de tanque con uno de los productos Garlon indicados antes.

11.0 USOS EN CULTIVOS

11.1 Cultivos de árboles, enredaderas y arbustos

ESTA SECCIÓN OFRECE INSTRUCCIONES DE USO QUE APLICAN A TODOS LOS CULTIVOS DE ÁRBOLES, ENREDADERAS Y ARBUSTOS INDICADOS EN LAS SIGUIENTES SECCIONES. VEA LAS SECCIONES DE CULTIVOS INDIVIDUALES SI NECESITA INSTRUCCIONES ESPECÍFICAS DE USO, INTERVALOS ANTES DE LA COSECHA, PRECAUCIONES Y RESTRICCIONES.

TIPOS DE APLICACIONES: Antes de sembrar (preparación del lugar); aplicaciones al voleo; equipo selectivo (rociador con pantalla, aplicador con enjuguador); rocío dirigido y tratamiento localizado en hileras (entre las hileras de árboles, enredaderas o arbustos) y franjas (en hileras de árboles, enredaderas o arbustos); control localizado de malezas; inhibición de pasto perenne; aplicación a tocones cortados

INSTRUCCIONES DE USO: A menos que se prohíba específicamente en las secciones de cultivo individuales que siguen, este producto se puede aplicar usando rociadores con brazo, aplicador por goteo controlado (CDA), rociadores con pantalla, aplicadores con enjuguador, rociadores de mano o de mochila, lanzas o pistolas para huerto, en hileras (entre las hileras de árboles, enredaderas o arbustos) y franjas (en hileras de árboles, enredaderas o arbustos), para el control de malezas o inhibición de pasto perenne, en arboleadas establecidas de árboles frutales y de frutos secos, huertos y viñedos. También se puede usar para preparar el lugar antes de sembrar o de trasplantar estos cultivos.

Aplique 12 onzas líquidas a 4 cuartos de galón de este producto por acre, como se indica en la sección "MALEZAS CONTROLADAS" de esta etiqueta. Utilice una proporción de aplicación más alta dentro del rango recomendado cuando las malezas están bajo estrés, crecen en poblaciones densas o tienen más de 12 pulgadas de altura. Se pueden repetir las aplicaciones de este producto cuando sea necesario, hasta un máximo de 8 cuartos de galón por acre por año. Consulte la sección "INFORMACIÓN DEL PRODUCTO" de esta etiqueta para más información sobre las proporciones de aplicación máximas.

PRECAUCIONES: Debe tener sumo cuidado para evitar que la solución herbicida, el rocío, arrastre o niebla de este producto entre en contacto con el follaje o la corteza verde de troncos, ramas, retorcidos, frutos u otras partes de árboles, cañas y enredaderas deseables. Evite aplicar cuando los cultivos tienen heridas por podas recientes o alguna otra lesión mecánica. El contacto de este producto con corteza que no está madura y oscura puede resultar en daño o destrucción del cultivo. Solo se pueden utilizar rociadores con pantalla o dirigidos en aquellos cultivos con alto potencial de contacto con el cultivo y solo cuando hay espacio libre suficiente. Para aplicaciones en franjas (en las mismas hileras de los árboles), solo se debe utilizar equipo selectivo (rociador dirigido, rociador con campana, rociador con pantalla o aplicador con enjuguador) a fin de reducir al mínimo el potencial de rocío excesivo o arrastre de este producto al cultivo. En el caso de cultivos de bayas, los rociadores con campana deben estar completamente cerrados por la parte superior, lateral, frontal y posterior. Solo se pueden emplear aplicadores con enjuguador o rociadores con pantalla que pueden evitar todo contacto de este producto con los cultivos. Vea instrucciones adicionales sobre uso y precauciones en la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta.

RESTRICCIONES: Deje transcurrir al menos 3 días entre la aplicación de este producto y el trasplante.

Entre hileras

INSTRUCCIONES DE USO: Este producto controlará o inhibirá las malezas anuales y perennes, así como las coberturas de terreno en medio de las hileras de cultivo de árboles, enredaderas y arbustos indicados en esta etiqueta. Si las malezas sufren estrés por sequía, riegue antes de aplicar. El control de malezas puede ser inferior si estas se han cortado recientemente en el momento de la aplicación.

MEZCLAS DE TANQUE: Se puede aplicar una mezcla de tanque de este producto con Goal 2XL para el control de malezas anuales entre las hileras de una variedad de cultivos de árboles, enredaderas y arbustos cuando las malezas están bajo estrés o crecen en poblaciones densas. La aplicación de 12 a 24 onzas líquidas de este producto por acre más una proporción apropiada de Goal 2XL controlará malezas anuales con una altura o longitud máxima de 6 pulgadas, incluyendo crabgrass, groundsel común, junglerice, lambsquarters común,

redroot pigweed, London rocket, ryegrass común, shepherd's-purse, sowthistle anual, filaree (inhibición), horseweed/marestail, stinging nettle y purslane común (inhibición). Esta mezcla de tanque controlará también el cheeseweed común (malva) o el hairy fleabane con una altura o longitud máxima de 3 pulgadas. Este producto también se puede aplicar en el medio de las hileras en mezclas de tanque con los siguientes productos.

2,4-D; bromacil; clethodim; diuron; fluazifop-P-butyl; flumioxazin; glufosinate-ammonium; indaziflam; napropamide; norflurazon; oryzalin; oxyfluorfen; pendimethalin; penoxsulam; pyraflufen ethyl; rimsulfuron; saflufenacil; sethoxydim; simazine; thiazopyr

Alion; Chateau Herbicide SW; Devinol 2-XT; Devinol 50-DF; Devinol DF-XT; Devinol DF-XT Ornamental; Direx 4L; Dri-Clean; Fusilade II Turf & Ornamental; Fusilade DX; Goal 2XL; GoatTender; Karmex DF; Matrix FNV; Matrix SG; Orchard Master Broadleaf; Orchard Master CA; Pindar GT; Poast; Poast Plus; Prowl 3.3 EC; Prowl H2O; Princep 4L; Princep Caliber 90; Princep Liquid; Rely 280; Select; Select 2 EC; Select Max Herbicide con Tecnología Inside; Simazine 4L; Simazine 4L Flowable; Simazine 90DF; Simazine 90 WDG; Sim-Trol 4L; Sim-Trol DF; Solicam DF; Surflan AS Agricultural; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Treewise Powered by Kixor; Venue; Visor Broadcrop

Asegúrese de que el producto que use esté aprobado para la aplicación en el cultivo a tratar. Lea y siga las instrucciones de la etiqueta para todos los productos en la mezcla de tanque.

Franjas (en hileras)

MEZCLAS DE TANQUE: Este producto se puede aplicar entre hileras de cultivos de áboles, enredaderas y arbustos en mezclas de tanque con los siguientes productos.

2,4-D; bromacil; clethodim; diuron; fluazifop-P-butyl; flumioxazin; glufosinate-ammonium; indaziflam; napropamide; norflurazon; oryzalin; oxyfluorfen; pendimethalin; penoxsulam; pyraflufen ethyl; rimsulfuron; saflufenacil; sethoxydim; simazine; thiazopyr

Alion; Chateau Herbicide SW; Devinol 2-XT; Devinol 50-DF; Devinol DF-XT; Devinol DF-XT Ornamental; Direx 4L; Dri-Clean; Fusilade II Turf & Ornamental; Fusilade DX; Goal 2XL; GoatTender; Karmex DF; Matrix FNV; Matrix SG; Orchard Master Broadleaf; Orchard Master CA; Pindar GT; Poast; Poast Plus; Prowl 3.3 EC; Prowl H2O; Princep 4L; Princep Caliber 90; Princep Liquid; Rely 280; Select; Select 2 EC; Select Max Herbicide con Tecnología Inside; Simazine 4L; Simazine 4L Flowable; Simazine 90DF; Simazine 90 WDG; Sim-Trol 4L; Sim-Trol DF; Solicam DF; Surflan AS Agricultural; Surflan AS Specialty; Surflan Flex; Surflan Flex T&O; Surflan XL 2G; Treewise Powered by Kixor; Venue; Visor Broadcrop

Asegúrese de que el producto que use esté aprobado para la aplicación en el cultivo a tratar. Lea y siga las instrucciones de la etiqueta para todos los productos en la mezcla de tanque.

RESTRICCIONES: No aplique estas mezclas de tanque en Puerto Rico.

Inhibición de pasto perenne

Este producto inhibe el crecimiento de pastos perennes como bahiagrass, bermudagrass, tall fescue, orchardgrass (*Dactylis glomerata*), Kentucky bluegrass (*Poa pratensis*) y quackgrass que se cultivan como cobertura del terreno en cultivos de áboles, enredaderas y arbustos.

Para la inhibición de tall fescue, fine fescue, orchardgrass y quackgrass, aplique 6 onzas líquidas de este producto en 10 a 20 galones de agua por acre.

Para inhibir las coberturas de Kentucky bluegrass, aplique 4.5 onzas líquidas de este producto por acre. No añada sulfato de amonio a la mezcla de tanque.

Para obtener mejores resultados, corte la cobertura de pasto de temporada fría en primavera para emparejar la altura y luego aplique este producto de 3 a 4 días después de cortar.

Para inhibir el crecimiento vegetativo y la inflorescencia de bahiagrass durante aproximadamente 45 días, aplique 4.5 onzas líquidas de este producto en 10 a 25 galones de agua por acre de 1 a 2 semanas después del reverdecer completo o después de cortar a una altura uniforme de 3 a 4 pulgadas antes de la emergencia de las inflorescencias. Para inhibir hasta por 120 días, aplique 3 onzas líquidas de este producto por acre, y luego una aplicación de 1.5 a 3 onzas líquidas por acre unos 45 días más tarde. No haga más de dos aplicaciones al año.

Para quemar bermudagrass, aplique de 24 a 48 onzas líquidas de este producto en 3 a 20 galones de agua por acre. Utilice este tratamiento solo si se puede tolerar la reducción del grupo de plantas de bermudagrass. Cuando se necesita quemar antes de la cosecha, realice la aplicación al menos 21 días antes de la cosecha para asegurarse de tener tiempo suficiente para que se produzca el quemado.

Para inhibir el bermudagrass, aplique de 4.5 a 12 onzas líquidas de este producto por acre al este de las Montañas Rocosas, y 12 onzas líquidas al oeste de las Montañas Rocosas, en un volumen de rociío total de 3 a 20 galones por acre de 1 a 2 semanas después de reverdecer completo. Si se corta el bermudagrass antes de la aplicación, mantenga como mínimo 3 pulgadas de altura. Se pueden realizar aplicaciones secuenciales si hay nuevo crecimiento y si se puede tolerar el daño y la reducción del grupo de plantas de bermudagrass. Al este de las Montañas Rocosas, aplique de 4.5 a 7.5 onzas líquidas de este producto por acre en condiciones de sombra o donde se desee un menor grado de inhibición.

Aplicación a tocones cortados

Este producto se puede aplicar a tocones recién cortados durante la preparación del lugar o la renovación del terreno para controlar rebrotos y retoños de tocones de muchas especies de áboles, algunas de las cuales se detallan abajo.

Árboles cítricos: Calamondin, Chironja, Citron, Citrus hybrids, Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Orange (todos), Pummelo, Tangelo (ugli), Tangor

Árboles frutales: Apple, Apricot, Cherry (dulce, amargo), Crabapple, Loquat, Mayhaw, Nectarine, Olive, Peach, Pear, Plum/Prune (todos), Quince

Árboles de nueces: Almond, Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert (hazelnut), Hickory nut, Macadamia, Pecan, Pistachio, Walnut (negro, inglés)

INSTRUCCIONES DE USO: Corte el árbol cerca de la superficie de la tierra y aplique inmediatamente una solución de este producto al 50 o 100 por ciento (sin diluir) a la superficie recientemente cortada utilizando el equipo de aplicación adecuado para asegurar la cobertura de la totalidad del cámbium. La demora en la aplicación puede resultar en un rendimiento inferior. Para obtener mejores resultados, corte el árbol durante el período de crecimiento activo y expansión completa de las hojas y aplique este producto.

PRECAUCIONES: NO REALICE UNA APLICACIÓN EN TOCONES CORTADOS CUANDO LAS RAÍCES DE ÁRBOLES DESEABLES ADYACENTES PUEDEN ESTAR INERTADAS EN LAS RAÍCES DEL TOCÓN CORTADO, PORQUE SE PUEDE CAUSAR DAÑO A LOS ÁRBOLES ADYACENTES. Algunos retoños, tallos o árboles pueden compartir el mismo sistema de raíces. Los árboles adyacentes de edad, altura y espacio similares pueden tener raíces compartidas. Ya sea inertadas o compartidas, es probable que se dañen tallos/árboles no tratados cuando se tratan uno o más árboles que comparten un sistema común de raíces.

11.1.1 Cultivos de frutas cítricas

CULTIVOS RECOMENDADOS: Todos los cultivos, variedades y/o híbridos de Calamondin; Chironja; Citron; Citrus Hybrids; Grapefruit (incluye Japanese summer); Kumquat; Lemon; Lime (incluye Australian desert lime, Australian finger lime, Australian round lime, Brown river finger lime, Mount white, New Guinea wild, Russell river, sweet, and Tahiti); Mandarin (incluye Mediterranean, Satsuma); Orange (todas); Pummelo; Tangelo (ugli); Tangerine (Mandarin); Tangor; Uniq Fruit (ugli)

TIPOS DE APLICACIONES: Antes de sembrar (preparación del lugar); aplicaciones al voleo; equipo selectivo (rociador con pantalla, aplicador con enjuguador); roció dirigido y tratamiento localizado en hileras (entre las hileras de árboles) o franjas (en hileras de árboles); inhibición de pasto perenne; aplicación a tocones cortados

INSTRUCCIONES DE USO: Las siguientes instrucciones de uso se refieren únicamente a las aplicaciones en Florida y Texas.

Para quemar o controlar las malezas indicadas abajo, aplique las proporciones recomendadas de este producto en 3 a 30 galones de agua por acre. Cuando la maleza tiene follaje denso, utilice de 10 a 30 galones de agua por acre.

Para quemar goatweed, aplique de 48 a 72 onzas líquidas de este producto en 20 a 30 galones de agua por acre cuando las plantas estén en crecimiento activo. Aplique 48 onzas líquidas por acre cuando las plantas tengan menos de 8 pulgadas de altura, y 72 onzas líquidas por acre cuando las plantas tengan más de 8 pulgadas de altura. Si la maleza goatweed tiene una altura mayor de 8 pulgadas, el uso de este producto en mezcla de tanque con Krovar I o Karmex podría mejorar el control. Consulte las etiquetas de los productos individuales para información específica sobre cultivos, dosis, restricciones geográficas y declaraciones preventivas.

Especies de maleza	Nivel de control de malezas perennes en varias proporciones de aplicación (cantidad de este producto por acre)			
	24 onzas líquidas	48 onzas líquidas	2.25 cuartos de galón	3.75 cuartos de galón
Bermudagrass	B	—	PC	C
Guinea grass				
<i>Texas y Florida Ridge</i>	B	C	C	C
<i>Florida Flatwoods</i>	—	B	C	C
Para grass	B	C	C	C
Torpedograss	S	—	PC	C

S = Inhibición, PC = Control parcial, B = Quemado, C = Control

RESTRICCIONES: Deje transcurrir al menos 1 día entre la aplicación y la cosecha de cultivos de frutas cítricas. Para huertos de citrus medica (cidro), aplique solamente como rocio dirigido.

11.2 Cultivos anuales y perennes

ESTA SECCIÓN OFRECE INSTRUCCIONES PARA EL USO DE ESTE PRODUCTO QUE APILA A TODOS LOS CULTIVOS INDICADOS EN LAS SIGUIENTES SECCIONES. VEA LAS SECCIONES DE CULTIVOS INDIVIDUALES SI NECESITA INSTRUCCIONES ESPECÍFICAS DE USO, INTERVALOS ANTES DE LA COSECHA, Y PRECAUCIONES Y RESTRICCIONES ADICIONALES.

TIPOS DE APLICACIONES: Barbecho químico; camas de barbecho antes de sembrar; antes de sembrar; al momento de sembrar; preemergencia; rociador con campana entre hileras; rociador con pantalla entre hileras; aplicador con enjuguador entre hileras; posterior a la cosecha

INSTRUCCIONES DE USO: Este producto se puede aplicar durante los intervalos de barbecho que preceden a la siembra, antes de sembrar o de trasplantar, al momento de sembrar, o preemergencia de los cultivos anuales y perennes indicados en esta etiqueta, excepto cuando se limita específicamente. Para todos los cultivos no indicados en esta etiqueta, las aplicaciones se deben realizar al menos 30 días antes de sembrar. A menos que se indique lo contrario, aplique este producto de acuerdo con las proporciones indicadas en la sección "MALEZAS CONTROLADAS" de esta etiqueta. Las proporciones de aplicación especificadas en esta etiqueta para el control de malezas difíciles, o las especificadas en las etiquetas complementarias separadas de este producto, reemplazan las proporciones en la sección "MALEZAS CONTROLADAS" de esta etiqueta. Puede encontrar información adicional acerca del control de malezas difíciles, en las Fichas Técnicas publicadas para este producto.

Se pueden repetir las aplicaciones de este producto cuando sea necesario, hasta un máximo de 6 cuartos de galón por acre por año. Consulte las secciones sobre uso específico en esta etiqueta para obtener información adicional sobre los intervalos mínimos requeridos antes de repetir la aplicación de este producto.

Se pueden utilizar rociadores con campana y aplicadores con enjuguador que eviten todo contacto del cultivo con la solución herbicida en el medio de hileras con mantillo o sin este, una vez que el cultivo esté establecido. Donde se detalla específicamente en las secciones de cultivo individuales, a continuación, se pueden utilizar aplicadores con enjuguador sobre ciertos cultivos para controlar las malezas más altas. Con estos métodos de aplicación es posible causar daños a los cultivos. Consulte la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta para información relacionada con el potencial de daño a los cultivos usando el equipo de aplicación selectiva.

La aplicación de tratamiento localizado de este producto para el control de malezas en un sistema de cosecha solo puede realizarse si se indica específicamente en las secciones de cultivo individuales que siguen.

A menos que se prohíba de otra manera, todas las aplicaciones de este producto indicadas en estas secciones se pueden realizar con equipos de aplicación aérea, de ser posible, siempre que la persona que aplica el producto cumpla con las precauciones y restricciones especificadas en esta etiqueta y en las etiquetas complementarias separadas que se publican para este producto. Consulte la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta para información sobre aplicación aérea y los procedimientos para evitar el arrastre del rocío que pudiera causar daño a cualquier vegetación que no sea el objetivo de la aplicación. La utilización de las zonas de barrera apropiadas ayudará a evitar el daño a la vegetación adyacente.

MEZCLAS DE TANQUE: Este producto puede mezclarse en tanques con otros herbicidas para proporcionar control residual de malezas, un espectro más amplio de control de malezas o un mecanismo de acción alternativo. Lea y siga siempre las indicaciones de las etiquetas de todos los productos utilizados en la mezcla de tanque. Utilice todos los productos conforme a las proporciones y la época de aplicación indicadas en las etiquetas. Algunos productos de mezcla de tanque tienen el potencial de provocar daños en el cultivo. Lea todas las etiquetas de los productos utilizados en la mezcla de tanque antes de usarlos, para determinar el potencial de daño a los cultivos. Siempre determine con anticipación la compatibilidad de los productos de la mezcla de tanque juntos en la sustancia vehicular, mezclando antes pequeñas cantidades proporcionales. Mezclar otros productos con este herbicida en el tanque de rocío puede causar incompatibilidad, antagonismo o la reducción de la eficacia de este producto. Monsanto Company no ha realizado pruebas de todas las formulaciones de productos para comprobar su compatibilidad o rendimiento en mezclas de tanque con este producto. Hasta el grado que sea compatible con la legislación pertinente, el comprador y todos los usuarios son responsables por todas las pérdidas o daños en relación con el uso o el manejo de mezclas de este producto con herbicidas u otros materiales que no se identifican específicamente en esta etiqueta, o en las etiquetas complementarias separadas o en las Fichas Técnicas publicadas para este producto. Consulte la sección "MEZCLA" de esta etiqueta para obtener mayor información sobre las mezclas de tanque.

PRECAUCIONES: Evite el contacto de este herbicida con follaje, brotes verdes o tallos, cortezas, raíces expuestas (incluidas las que emergen del mantillo plástico) o frutos de cultivos, ya que podría ocasionar daños severos o la destrucción de los cultivos. Las plántulas trasplantadas que tienen contacto con las malezas que están todavía mojadas con una solución de rocío de este producto podrían causar daños considerables al cultivo. Cuando realice aplicaciones de preemergencia, realícelas antes de la emergencia del cultivo para evitar graves daños al cultivo. Las aplicaciones al voleo de este producto efectuadas en la emergencia provocarán daños o serán fatales para las plántulas. Aplique antes de que germinen las semillas en tierra arenosa gruesa para minimizar aún más el riesgo de daños al cultivo. En los cultivos donde se permite el tratamiento localizado, el cultivo rociado con este producto se matará junto con las malezas. Tenga cuidado de no rociar ni permitir que el rocío se disperse fuera de la zona a tratar para evitar destruir otros cultivos. Vea la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta para obtener información adicional.

La aplicación antes de la cosecha en cultivos para semilla podría reducir su vigor o poder de germinación. Hasta el grado que sea compatible con la legislación pertinente, el comprador y todos los usuarios son responsables por todas las pérdidas o daños relacionados con el uso de este producto antes de la cosecha en cualquier cultivo para semilla.

RESTRICCIONES: Observe las proporciones de aplicación máximas indicadas en toda esta etiqueta. Las proporciones máximas permitidas se aplican al uso de este producto combinado con el uso de todos y cada uno de los otros herbicidas que contienen glifosato como el ingrediente activo, ya sea que se apliquen por separado o como mezclas. Calcule las proporciones de aplicación (equivalentes de ácido glifosato) y asegúrese de que el uso total de este y otros productos que contienen glifosato no exceda la proporción máxima especificada. Consulte la sección "INFORMACIÓN DEL PRODUCTO" de esta etiqueta para más información sobre las proporciones de aplicación máximas.

A menos que se especifique de otro modo en esta etiqueta, la aplicación con equipo selectivo, incluyendo los aplicadores con enjecedor y rociadores con campana, se deben realizar al menos 14 días antes de la cosecha. En cultivos que aceptan tratamientos localizados, no aplique este producto a más del 10 por ciento del total del terreno a ser cosechado, a menos que se indique lo contrario. Las aplicaciones posteriores a la cosecha o en barbecho se deben realizar como mínimo 30 días antes de sembrar algún cultivo no indicado en esta etiqueta.

No coseche ni utilice como alimento la vegetación del área durante 8 semanas después de la aplicación de postemergencia, a menos que se indique lo contrario.

Cuando aplique este producto como mezcla de tanque con uno o más productos, consulte la etiqueta de cada producto de la mezcla de tanque para ver las restricciones y aplicar la mezcla según las precauciones más restrictivas de cada producto de la mezcla de tanque.

11.2.1 Caña de azúcar

TIPOS DE APLICACIONES: Barbecho químico; antes de sembrar; al momento de sembrar; preemergencia; rociador con campana entre hileras; rociador con pantalla entre hileras; aplicador con enjecedor entre hileras; tratamiento localizado; regulador de crecimiento; posterior a la cosecha

Antes de sembrar, al momento de sembrar, preemergencia

INSTRUCCIONES DE USO: Este producto se puede aplicar en campos de caña de azúcar, alrededor de esos campos o bien, en el campo antes de la emergencia de la caña.

RESTRICCIONES: No aplique a la vegetación en o alrededor de zanjas, canales o estanques que contengan agua para riego, a menos que el surfactante agregado a la solución de rocío esté indicado para uso herbicida y aprobado para aplicación acuática.

Tratamiento localizado

INSTRUCCIONES DE USO: Este producto se puede aplicar como tratamiento localizado en caña de azúcar. Para el control de la caña de azúcar espontánea o enferma, prepare una solución de 1 por ciento de este producto en agua y rocíe hasta mojar usando un rociador de mano. Pueden obtenerse mejores resultados en caña de azúcar espontánea o enferma si se realiza la aplicación cuando haya por lo menos 7 hojas nuevas. Evite el contacto de este herbicida con la caña de azúcar sana, ya que podría ocasionar daños severos o destrucción.

RESTRICCIONES: No utilice el follaje de la caña de azúcar dentro del área de aplicación como alimento o pastura.

Rociadores con campana

INSTRUCCIONES DE USO: Este producto se puede aplicar con un rociador con campana para el control de malezas entre hileras de caña de azúcar. Vea en la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta las instrucciones adicionales para el empleo de rociadores con campana.

PRECAUCIONES: No permita el contacto de las malezas dentro del área tratada con el cultivo.

Regulación del crecimiento de plantas

INSTRUCCIONES DE USO: Este producto puede utilizarse como tratamiento foliar para regular el crecimiento de las plantas para acelerar la maduración y extender el período de nivel alto de sacarosa en caña de azúcar tanto de bajo tonelaje como de gran tonelaje. La mayor parte del aumento de sacarosa se concentra en los nódulos superiores del tallo de la caña tratada. Para maximizar la recuperación del azúcar cuando se realiza el desmoco en la cosecha, corte en la base de la cuarta hoja. Antes de aplicar este producto, consulte con la autoridad de caña de azúcar de su estado o con su representante local de Monsanto acerca del grado de respuesta de sacarosa que puede anticipar.

Como resultado de la desecación de la hoja, se puede esperar mejor quema de los desechos.

Consulte las proporciones y los tiempos de aplicación siguientes de acuerdo con el estado donde se cultive la caña de azúcar. Al tratar caña de azúcar bajo condiciones de maduración adversas, o cuando aplique a variedades menos receptivas, utilice la proporción más elevada dentro del rango recomendado.

FLORIDA — Aplique de 6 a 14 onzas líquidas de este producto por acre, de 3 a 5 semanas antes de la cosecha del ÚLTIMO RETOÑO DE CAÑA SOLAMENTE.

HAWAII — Aplique de 10 a 24 onzas líquidas de este producto por acre, de 4 a 10 semanas antes de la cosecha.

LOUISIANA — Aplique de 4 a 14 onzas líquidas de este producto por acre, de 3 a 7 semanas antes de la cosecha del RETOÑO DE CAÑA SOLAMENTE.

PUERTO RICO — Aplique 6 onzas líquidas de este producto por acre de 3 a 5 semanas antes de la cosecha de RETOÑO DE CAÑA SOLAMENTE.

TEXAS — Aplique de 6 a 14 onzas líquidas de este producto por acre, de 3 a 5 semanas antes de la cosecha del RETOÑO DE CAÑA SOLAMENTE.

PRECAUCIONES: La aplicación de este producto puede provocar que los ojos se entrecierren. Este producto puede que no aumente el contenido de sacarosa de la caña de azúcar en condiciones de buena maduración natural. De 2 a 3 semanas después de la aplicación, este producto puede causar que las hojas pasen de un ligero color amarillento a un color café pronunciado y se sequen, y los entrenudos superiores se acorten. Puede morir el eje.

La lluvia antes de transcurrir 6 horas de la aplicación puede reducir la eficacia de este producto.

La aplicación en cultivos de caña de azúcar para semilla podría reducir su vigor o germinación. Hasta el grado en que sea compatible con la legislación pertinente, el comprador y todos los usuarios son responsables por todas las pérdidas o daños relacionados con el uso de este producto antes de la cosecha en cualquier cultivo de caña de azúcar para semilla.

RESTRICCIONES: No utilice el forraje de la caña de azúcar para alimentar animales después de la aplicación. Durante 30 días después de la aplicación de este producto, no siembre cultivos subsiguientes aparte de los siguientes: alfalfa y otras legumbres para forraje, frijoles (todo tipo), maíz (todo tipo), algodón, melones (todo tipo), pastos para pastura, maní, papas (irlandesas o dulces), sorgo (milo), soya, calabaza (todo tipo) o trigo.

No aplique para mejorar la maduración de ningún otro cultivo que no sea la caña de azúcar. El uso de este producto de cualquier manera contraria a las indicaciones contenidas en esta etiqueta, podría causar lesiones a personas, animales o cultivos u otras consecuencias no deseadas.

Tratamientos de barbecho

INSTRUCCIONES DE USO: Este producto se puede utilizar como sustituto de labranza en campos de barbecho entre cultivos de caña de azúcar. Este producto también puede usarse para quitar los últimos rastrojos de retiños de caña al aplicar de 3 a 3.75 cuartos de galón de este producto en 10 a 40 galones de agua por acre a los nuevos brotes de al menos 7 nuevas hojas. Deje transcurrir al menos 7 días entre la aplicación y la labranza. Se pueden realizar aplicaciones aéreas de hasta 72 onzas líquidas por acre en lugares con barbecho, donde la barrera es suficiente para evitar la dispersión a los cultivos adyacentes. Se pueden usar mezclas de tanque con 2,4-D o dicamba. Asegúrese de que el producto específico que se está usando esté indicado para esta aplicación en la caña de azúcar. Lea y siga las instrucciones de la etiqueta para todos los productos en la mezcla de tanque.

11.3 Producción de semillas de paso o tepes

INSTRUCCIONES DE USO: Consulte la sección "MALEZAS CONTROLADAS" de esta etiqueta para conocer las proporciones de aplicación de este producto para malezas específicas. Cuando se aplica del modo indicado, este producto controlará estos pastos anuales y perennes, y las malezas de hoja ancha indicados. Las proporciones de aplicación especificadas en esta etiqueta para el control de malezas difíciles, o las especificadas en las etiquetas complementarias separadas de este producto, reemplaza las proporciones indicadas en la sección "MALEZAS CONTROLADAS" de esta etiqueta. Puede encontrar información adicional acerca del control de malezas difíciles, en las Fichas Técnicas publicadas para este producto.

CULTIVOS RECOMENDADOS: Cualquier pasto (familia de las gramíneas), excepto maíz; sorgo; caña de azúcar; cebada; trigo sarraceno; mijo (pearl, proso); avena; arroz; centeno; quinoa; teff; teosinte; triticale; trigo (todos los tipos); arroz salvaje

TIPOS DE APLICACIONES: Antes de sembrar; al momento de sembrar; preemergencia; renovación; eliminación de grupos de plantas establecidos; preparación del lugar; rociador con pantalla; aplicador con enjecedor; tratamiento localizado; creación de hileras en ryegrass anual

Antes de sembrar, al momento de sembrar, preemergencia, renovación, eliminación de grupos de plantas establecidos, preparación del lugar

INSTRUCCIONES DE USO: Este producto controla la mayor parte de la vegetación existente a los fines de la renovación del césped o de zonas de semillas de pasto para forraje, o para establecer césped cultivado para tepes. Este producto se puede utilizar para destruir restos de vegetación no deseada cuando los campos de producción se convierten para especies o cultivos alternativos. No remueve la tierra ni las partes de la planta que estén bajo

tierra antes del tratamiento y retrase las técnicas de labranza o renovación como segado vertical, ahuecamiento o rebando al menos 7 días después de la aplicación para que se produzca el correcto traslado del herbicida a las partes subterráneas de la planta.

Aplique antes, durante o después de sembrar o para renovación. En aquellos lugares donde la vegetación existente crece con manejo de césped segado, aplique este producto después de omitir al menos una siembra regular a fin de darle tiempo para crecer lo suficiente para que el rocio de herbicida sea interceptado por las plantas. Para lograr máximo control de la vegetación existente, demore la siembra hasta determinar si se produce algún crecimiento de partes de plantas subterráneas. Cuando se necesita repetir el tratamiento, debe permitirse el crecimiento suficiente de las plantas antes de la aplicación. Para pastos de estación cálida, como bermudagrass, las aplicaciones en verano u otoño brindan el mejor control. Se pueden utilizar equipos al voleo para controlar restos de tepes o de otra vegetación no deseada después de cosechar los tepes. Se pueden aplicar proporciones de hasta 3.75 cuartos de galón por acre para eliminar totalmente grupos de plantas establecidos de especies de pastos difíciles de eliminar.

RESTRICCIONES: Si el total de proporciones de aplicación es 2.25 cuartos de galón de este producto por acre o menos, no se requiere período de espera entre la aplicación y la utilización como forraje o pastura del ganado. Si la proporción es mayor de 2.25 cuartos de galón por acre, retire el ganado doméstico antes de aplicar y espere 8 semanas después de la aplicación para utilizar como pastura o para cosechar. Los cultivos indicados en esta etiqueta se pueden sembrar en el área en cualquier momento; todos los demás cultivos pueden sembrarse 30 días después de la aplicación.

Rociadores con pantalla

INSTRUCCIONES DE USO: Aplique de 24 a 72 onzas líquidas de este producto en 10 a 20 galones de agua por acre usando un rociador con pantalla para controlar las malezas entre las hileras de semilla para pasto. La siembra uniforme en hileras rectas facilita las aplicaciones con rociador con pantalla. Se obtienen los mejores resultados cuando el cultivo de semilla de pasto es suficientemente pequeño como para pasar con facilidad por las protecciones. Vea en la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta las instrucciones adicionales para el empleo de rociadores con pantalla.

PRECAUCIONES: Cualquier tipo de contacto de este producto con vegetación que no se desea incluir en el tratamiento podría causar daño.

Aplicador con enjuguador

INSTRUCCIONES DE USO: Este producto se puede aplicar por la parte superior de pastos deseables utilizando aplicadores con enjuguador para controlar las malezas altas. Vea en la sección "EQUIPO Y TÉCNICAS DE APLICACIÓN" de esta etiqueta las instrucciones adicionales para el empleo de aplicadores con enjuguador.

PRECAUCIONES: Las gotas, la niebla, la espuma o las salpicaduras de la solución herbicida que se depositan en la vegetación deseable podrían causar decoloración, atrofia o destrucción.

Tratamiento localizado

INSTRUCCIONES DE USO: Aplique una solución de este producto al 1 por ciento con equipo de rocio manual para controlar las malezas en la vegetación establecida, antes del despuete de los pastos cultivados para semilla o para controlar restos de tepes o de otra vegetación no deseada después de cosechar los tepes.

PRECAUCIONES: Este producto matará el pasto deseable junto con las malezas. Tenga cuidado de no rociar ni permitir que el rocio se disperse fuera de la zona a tratar para evitar destruir otros cultivos.

Creación de hileras en ryegrass anual

INSTRUCCIONES DE USO: Se recomienda utilizar boquillas de baja presión o boquillas de goteo diseñadas para concentrar la aplicación en una franja estrecha. Ajuste la altura de la boquilla para establecer el espaciado deseado entre hileras y aplique de 12 a 24 onzas líquidas de este producto por acre. Se obtienen los mejores resultados cuando las aplicaciones se realizan antes de que las plantas de ryegrass alcancen 6 pulgadas de altura. Utilice la proporción más alta dentro del margen recomendado si las plantas de ryegrass tienen más de 6 pulgadas de altura.

PRECAUCIONES: Tenga cuidado de no rociar ni permitir que el rocio se disperse fuera de la zona a tratar para evitar destruir otros cultivos. Hasta el grado que sea compatible con la legislación pertinente, el cultivador asume toda la responsabilidad por las pérdidas de cultivos causadas por la aplicación incorrecta de este producto.

12.0 MALEZAS CONTROLADAS

Lea toda la etiqueta antes de usar este producto.

A menos que se indique lo contrario, este producto requiere que se agregue un surfactante no iónico cuyo uso con herbicidas esté recomendado en la etiqueta para la solución de rocio. Consulte la sección "MEZCLA" de esta etiqueta para obtener más información sobre el uso de surfactantes con este producto.

Aplique siempre la proporción de aplicación o concentración de solución de rocio mayor de este producto dentro del rango indicado cuando las malezas son muy densas o cuando crecen en áreas no tocadas (no cultivadas).

El control de malezas puede ser deficiente si se aplica a malezas cubiertas de polvo. En el caso de malezas segadas, utilizadas como pastura o cortadas, déjelas crecer nuevamente antes de aplicar este producto. Consulte las secciones que siguen para conocer las proporciones de aplicación y el momento de aplicación para el control de malezas anuales y perennes, árboles, enredaderas y matorrales leñosos.

12.1 Control de malezas, renovación y segado químico en céspedes

El uso de este producto descrito en esta sección puede aplicarse al césped que crece en cualquier terreno indicado en esta etiqueta. Asegúrese de que cualquier producto de mezcla de tanque aplicado con este producto esté registrado para el uso deseado y en el sitio de la aplicación.

Control de malezas en Bermudagrass y Bahiagrass latentes

Este producto puede usarse para controlar o inhibir muchas malezas anuales y tall fescue (*Festuca arundinacea*) para el alivio eficaz de céspedes de bermudagrass y bahiagrass latentes antes de reverdecer en primavera las áreas donde estos céspedes son cobertura de terreno deseable y se puede tolerar algún daño o decoloración temporales.

Aplique de 6 a 48 onzas líquidas de este producto en 10 a 40 galones de agua por acre cuando bermudagrass y bahiagrass estén latentes y antes de reverdecer en primavera.

Aplicar más de 12 onzas líquidas de este producto por acre en céspedes bermudagrass y bahiagrass con mucho mantenimiento, como campos de golf y jardines, podría ocasionar daños o que se retrase el reverdecer en primavera.

Para el control residual de malezas en bermudagrass y bahiagrass latentes, este producto se puede mezclar en tanque con los herbicidas Outrider®, Oust Extra u Oust XP. Aplique de 6 a 48 onzas líquidas de este producto en una mezcla de tanque con la proporción apropiada de herbicida Outrider, Oust Extra u Oust XP en 10 a 40 galones de agua por acre. Para evitar que el reverdecer se retrase y minimizar el daño, no aplique más de 1 onza de herbicida Oust Extra u Oust XP por acre sobre bermudagrass y no más de 0.5 onzas sobre bahiagrass, y evite el tratamiento cuando estos pastos se encuentren en estado semialatente.

NO aplique este producto en mezcla de tanque con los herbicidas Outrider, Oust Extra u Oust XP en céspedes bermudagrass y bahiagrass con mucho mantenimiento, como campos de golf y jardines.

Control de malezas en Bermudagrass en crecimiento activo

Este producto se puede usar para controlar total o parcialmente muchas malezas anuales y perennes en bermudagrass en crecimiento activo. La aplicación de este producto podría ocasionar algún daño al bermudagrass, pero este se recuperará en condiciones de humedad una vez desaparezcan los efectos del producto. Utilícelo solo en bermudagrass bien establecido, donde puede tolerarse algún daño o decoloración temporales.

Aplique de 12 a 36 onzas líquidas de este producto en 10 a 40 galones de solución de rocio por acre. Use una proporción de aplicación más baja dentro de este rango para controlar malezas anuales de menos de 4 pulgadas de alto (o longitud de estolón) y aumente la proporción hacia el extremo superior del rango cuando las malezas aumenten de tamaño o se aproximen a la formación de flores o inflorescencias. En estas proporciones de aplicación, este producto proporcionará control parcial de las siguientes malezas perennes en bermudagrass en crecimiento activo:

- Bahiagrass
- Bluestem, silver
- Fescue, tall
- Johnsongrass
- Trumpet creeper
- Vaseygrass

PRECAUCIONES: Aplicar más de 12 onzas líquidas de este producto por acre en bermudagrass con mucho mantenimiento, como campos de golf y jardines, podría causar daño y decoloración inaceptables del césped. Para un espectro más amplio de control de malezas en bermudagrass en crecimiento activo, este producto se puede mezclar en tanque con los herbicidas Outrider, Oust Extra u Oust XP. Aplique estas mezclas de tanque solo en bermudagrass bien establecido, donde puede tolerarse algún daño o decoloración temporales. No haga más de una aplicación de este producto en estas mezclas de tanque en la misma temporada, de lo contrario podría causar un daño considerable al bermudagrass.

Aplique de 6 a 24 onzas líquidas de este producto por acre en una mezcla de tanque con el herbicida Outrider para control total o parcial de Johnsongrass y otras malezas indicadas en la etiqueta del herbicida Outrider. Use una proporción de aplicación mayor de ambos productos dentro de los rangos indicados para control de malezas anuales y perennes de más de 6 pulgadas de alto.

Aplique de 12 a 24 onzas líquidas de este producto por acre en una mezcla de tanque con herbicida Oust Extra u Oust XP por acre para un mejor control de las malezas indicadas en dichas etiquetas. Use una proporción de aplicación más baja de cada producto dentro de los rangos dados para controlar malezas anuales indicadas en las etiquetas de menos de 4 pulgadas de alto (o longitud de estolón) y aumente las proporciones hacia el extremo superior de los rangos cuando las malezas anuales aumenten de tamaño y se aproximen a la etapa de flores o inflorescencias. Esta mezcla de tanque proporcionará control parcial de las siguientes malezas perennes en bermudagrass en crecimiento activo:

- Bahiagrass
- Bluestem, silver
- Broomsedge
- Dallisgrass
- Dock, curly
- Dogfennel
- Fescue, tall
- Johnsongrass
- Poorjoe
- Trumpet creeper
- Vaseygrass
- Vervain, blue

PRECAUCIONES: Aplique estas mezclas de tanque solo en bermudagrass bien establecido, donde puede tolerarse algún daño o decoloración temporales. NO aplique este producto en mezcla de tanque con los herbicidas Outrider u Oust en céspedes bermudagrass con mucho mantenimiento, como campos de golf y jardines.

Control de malezas en Bahiagrass en crecimiento activo

Para inhibir el crecimiento vegetativo y la inflorescencia de bahiagrass durante aproximadamente 45 días, aplique 4 onzas líquidas de este producto en 10 a 40 galones de agua por acre de 1 a 2 semanas después del reverdecer completo o después de cortar a una altura uniforme de 3 a 4 pulgadas antes de la emergencia de las inflorescencias.

Para inhibir el crecimiento de bahiagrass hasta por 120 días, aplique 3 onzas líquidas de este producto por acre, seguido por una aplicación de 2 a 3 onzas líquidas por acre unos 45 días más tarde. No haga más de 2 aplicaciones para inhibir el crecimiento al año.

Para un espectro más amplio de control de malezas en bahiagrass en crecimiento activo, este producto se puede mezclar en tanque con los herbicidas Outrider®, Oust Extra u Oust XP.

Aplique de 1.5 a 3.5 onzas líquidas de este producto por acre en una mezcla de tanque con una proporción adecuada de herbicida Outrider por acre para controlar malezas perennes o malezas anuales de más de 4 pulgadas de alto.

Aplique 4 onzas líquidas de este producto por acre en una mezcla de tanque con una proporción adecuada de herbicida Oust Extra u Oust XP de 1 a 2 semanas después de la primera siembra de la primavera para un mejor control de las malezas indicadas en la etiqueta del herbicida Oust en bahiagrass en crecimiento activo. Haga esta aplicación una sola vez al año.

PRECAUCIONES: Aplique estas mezclas de tanque solo en bahiagrass bien establecido, donde puede tolerarse algún daño o decoloración temporales.

Renovación de céspedes

Este producto controla la mayoría de la vegetación existente antes de la renovación del césped o de establecer céspedes cultivados para semilla o tepes. Para lograr máximo control de la vegetación existente, demore la siembra o la colocación del césped hasta determinar si se produce algún crecimiento de partes de plantas

subterráneas. Cuando se necesita repetir las aplicaciones, debe permitirse el crecimiento suficiente de las plantas antes de volver a aplicar este producto. La aplicación en verano o en otoño proporciona un mejor control de los pastos de estación cálida, como el bermudagrass. Para el césped controlado, aplique este producto después de dejar de cortar el césped regularmente por lo menos una vez de manera que crezca lo suficiente para que la solución de rocío sea interceptada por las plantas.

Este producto no tiene actividad residual en el suelo y no afectará las plantas, semillas o tepes sembrados en el área después de la aplicación.

Puede utilizarse un equipo de mano para el tratamiento localizado de vegetación no deseada que crezca en el césped existente. Se puede usar aplicación al voleo o tratamiento localizado con rociador de mano para controlar restos de tepes o de otra vegetación no deseada después de cosechar los tepes.

PRECAUCIONES: No remueva la tierra ni las partes de la planta que estén bajo tierra antes de aplicar este producto. La labranza y las técnicas de renovación como corte vertical, perforación o rebanado deben esperar por lo menos 7 días después de la aplicación a fin de permitir la absorción adecuada de este herbicida en las partes de la planta que estén bajo tierra.

RESTRICCIONES: Si el total de proporciones de aplicación es 2.25 cuartos de galón de este producto por acre o menos, no se requiere período de espera entre la aplicación y la utilización como forraje o pastura del ganado.

Si la proporción es mayor de 2.25 cuartos de galón por acre, retire el ganado doméstico antes de aplicar y espere 8 semanas después de la aplicación para utilizar como pastura o para cosechar.

Segado químico

Este producto se puede usar para inhibir el crecimiento de pastos perennes y anuales para servir como sustituto de la siega.

Pastos perennes – aplique 5 onzas líquidas de este producto por acre para inhibir el crecimiento de Kentucky bluegrass o 6 onzas líquidas para inhibir tall fescue, fine fescue, orchardgrass, quackgrass o reed canarygrass en 10 a 40 galones de solución de rocío por acre después que los pastos hayan reverdecido hasta por lo menos 75 por ciento de verde en la primavera, o de 7 a 10 días después de segar, cuando haya suficiente recrecimiento para proporcionar una altura deseable para regular el crecimiento. Utilice el segado químico únicamente en las áreas donde se puede tolerar cierto daño o decoloración temporales en pastos perennes.

Pastos anuales – aplique de 3 a 4 onzas líquidas de este producto en 10 a 40 galones de solución de rocío por acre para inhibir el crecimiento de algunos pastos anuales, como annual ryegrass, wild barley y wild oats en crecimiento activo en pasto grueso en bordes de carreteras u otras áreas industriales y antes de que las inflorescencias estén en la etapa de desarrollo de bota. Esta aplicación puede causar daños a los pastos anuales deseados.

PRECAUCIONES: Utilice este producto para el segado químico únicamente en las áreas donde se puede tolerar cierto daño o decoloración temporales en pastos perennes y anuales.

12.2 Malezas anuales

Resulta más fácil controlar las malezas anuales cuando son pequeñas y están en crecimiento activo. El desarrollo de nuevas hojas indica crecimiento activo.

Para control total o parcial de las malezas anuales indicadas en esta sección cuando tienen menos de 6 pulgadas de alto o longitud de estolón y están en crecimiento activo, aplique 24 onzas líquidas de este producto por acre. Si tienen más de 6 pulgadas de alto o longitud de estolón, o crecen lentamente bajo condiciones de estrés, aumente la proporción de aplicación de 1 a 4 cuartos de galón por acre, dependiendo de la altura de la maleza y la gravedad de las malas condiciones de crecimiento.

Para aplicación usando un rociador manual con una técnica de rocío para mojar, aplique una solución de este producto al 0.5 por ciento a malezas anuales de menos de 6 pulgadas de altura o de longitud de estolón antes de la formación de inflorescencias en pasto o de la formación de brotes en malezas de hoja ancha. Para controlar las malezas anuales que tienen más de 6 pulgadas de alto o incluso malezas más pequeñas que crecen en condiciones de estrés, use una solución del 0.75 al 1.5 por ciento.

Aplique la concentración máxima de este producto dentro de este rango para malezas difíciles de controlar o para controlar malezas con una altura mayor a las 24 pulgadas.

Para controlar malezas anuales usando un aplicador de mano por goteo controlado (CDA), aplique una solución de 15 por ciento de este producto (de 19 a 20 onzas líquidas de este producto por galón de solución de rocío) a una velocidad de flujo de 2 onzas líquidas de solución de rocío por minuto y caminando a una velocidad de 1.5 millas por hora (1 cuarto de galón de solución de rocío por acre). Si usa el aplicador por goteo controlado montado en un vehículo, aplique la cantidad requerida de este producto como se indica en esta sección en 2 a 15 galones de agua por acre.

Para obtener mejor control, no pade, corte, labre, quemé ni altere la vegetación en el área de aplicación por un mínimo de 3 días después de la aplicación.

Este producto no tiene actividad residual en el suelo y no controla la emergencia de nuevas malezas anuales a partir de semillas. Aplicaciones subsiguientes de este producto serán necesarias para

ESPECIES DE MALEZAS

Anoda, spurred	Brome, Japanese
Balsam apple ¹	Broomsedge
Barley	Buttercup
Barley, little	Castor bean ²
Barnyardgrass	Cheatgrass
Bassia, fivehook	Cheeseweed (<i>Malva parviflora</i>)
Bittercress	Chervil
Bluegrass, annual	Chickweed
Bluegrass, bulbous	Cocklebur
Brome, downy	Copperleaf, hophornbeam

Copperleaf, Virginia	Panicum, Texas
Coreopsis, plains/tickseed	Pennycress, field
Corn	Pepperweed, Virginia
Crabgrass	Pigweed
Cupgrass, woolly	Puncturevine
Dwarf dandelion	Purslane, common
Eclipta	Pusley, Florida
False dandelion	Ragweed, common
False flax, small-seed	Ragweed, giant
Fiddleneck	Rice, red
Filaree	Rocket, London
Fleabane, annual	Rocket, yellow
Fleabane, hairy (<i>Conyza bonariensis</i>)	Rye
Fleabane, rough	Ryegrass
Foxtail	Sandbur, field
Foxtail, Carolina	Sesbania, hemp
Geranium, Carolina	Shattercane
Goatgrass, jointed	Shepherd's-purse
Goosegrass	Sicklepod
Groundsel, common	Signalgrass, broadleaf
Henbit	Smartweed, ladysthumb
Horseweed/Marestail (<i>Conyza canadensis</i>)	Smartweed, Pennsylvania
Itchgrass	Sorghum, grain (milo)
Johnsongrass, seedling	Sowthistle, annual
Junglerice	Spanish needles ³
Knotweed	Speedwell, corn
Kochia	Speedwell, purslane
Lambsquarters	Sprangletop
Lettuce, prickly	Spurge, annual
Mannagrass, eastern	Spurge, prostrate
Mayweed	Spurge, spotted
Medusahead	Spurry, umbrella
Morning glory (<i>Ipomoea spp</i>)	Starthistle, yellow
Mustard, blue	Stinkgrass
Mustard, tansy	Sunflower
Mustard, tumble	Teaweed / Prickly sida
Mustard, wild	Thistle, Russian
Nightshade, black	Velvetleaf
Oats	Wheat
Panicum, browntop	Wild oats
Panicum, fall	Witchgrass

¹ Para controlar balsam apple, aplique este producto usando equipo de mano solamente.

² Se puede lograr el control de castor bean también inyectando 4 mililitros de este producto concentrado (sin diluir) por planta en la parte inferior del tallo principal.

³ Para controlar Spanish needles, aplique 48 onzas líquidas de este producto por acre.

12.3 Malezas perennes

Se puede obtener un mejor control de las malezas perennes cuando se aplica este producto a las malezas objetivo que están pequeñas y en crecimiento activo. El desarrollo de nuevas hojas indica crecimiento activo. Si debe aplicar este producto a malezas más grandes o a malezas que crecen lentamente bajo condiciones de estrés, aplique en una proporción o concentración de solución de rocío hacia el extremo superior del rango especificado.

Si las malezas fueron segadas o labradas, no aplique este producto hasta que las plantas hayan reanudado el crecimiento activo y llegado a la etapa de crecimiento recomendada o hayan crecido lo suficiente para que la solución de rocío sea interceptada por las plantas. Para obtener mejor control, no pade, corte, labre, quemé ni altere la vegetación en el área de aplicación por un mínimo de 7 días después de la aplicación.

Para controlar las malezas perennes indicadas en esta etiqueta usando equipo de mochila o de mano y una técnica de aplicación de bajo volumen, aplique una solución de 4 a 8 por ciento de este producto sobre la corona de la planta objetivo para cubrir el 50 por ciento del follaje superior de la planta.

Para controlar malezas perennes usando un aplicador de mano por goteo controlado (CDA), aplique una solución de 15 a 30 por ciento de este producto (de 19 a 38 onzas líquidas de este producto por galón de solución de rocío) a una velocidad de flujo de 2 onzas líquidas de solución de rocío por minuto y caminando a una velocidad de 0.75 millas por hora (de 2 a 4 cuartos de galón de solución de rocío por acre). Si usa el aplicador por goteo controlado montado en un vehículo, aplique la cantidad requerida de este producto como se indica en la siguiente tabla, en 2 a 15 galones de agua por acre.

Este producto debe aplicarse en otoño antes de una helada agresiva.

Este producto no tiene actividad en el suelo y no controla la emergencia de malezas perennes a partir de semillas, raíces, rizomas o tubérculos subterráneos latentes presentes en el suelo en el momento de la aplicación. Se necesitará más de una aplicación de este producto para el control continuo de malezas que emergen después de la aplicación.

TABLA DE PROPORCIONES PARA MALEZAS PERENNES

Especies de maleza	Proporción por difusión (cuartos de galón/acre)	Concentración del rocio para mojar en rociador de mano (% solución)
Alfalfa*	0.7	1.5
Alligatorweed*	3	1.3
Aplique este producto cuando la mayoría de las plantas objetivo estén en floración. Puede ser necesaria más de una aplicación para el control total.		
Anise (fennel)	1.5 – 3	1 – 1.5
Bahiagrass	2.3 – 3.75	1.5
Beachgrass, European	—	3.5
Aplique una solución al 3.5 por ciento de este producto usando una técnica de rocio para mojar o una solución al 8 por ciento usando una técnica de aplicación de bajo volumen. Pueden obtenerse mejores resultados cuando se realiza la aplicación a malezas objetivo que estén en crecimiento activo en etapa de desarrollo de bota a floración. Aplique antes de que las hojas pierdan más del 50 por ciento del color verde en otoño. Observe el sitio de la aplicación y vuelva a aplicar este producto a las malezas objetivo que quedaron, si es necesario, antes de volver a sembrar el área con la vegetación deseada. Para el control selectivo de European beachgrass, aplique una solución de 33.3 por ciento de este producto que contenga de 1 a 2.5 por ciento de un surfactante no iónico durante el período de crecimiento activo usando un aplicador con enjuguador. Obtendrá un mejor control al maximizar la cantidad de hojas individuales que tienen contacto con el aplicador con enjuguador o dando una segunda pasada en sentido contrario. Evite el contacto de la solución herbicida con la vegetación deseable.		
Bentgrass*	1	1.5
Bermudagrass	4	1.5
Aplique cuando tenga inflorescencias.		
Bermudagrass, agua (knotgrass)	1	1.5
Bindweed, campo	2.3 – 3.75	1.5
Para controlar, aplique de 3 a 3.75 cuartos de galón de este producto por acre como aplicación al voleo al oeste del río Mississippi y de 2.3 a 3 cuartos de galón por acre al este del río Mississippi cuando bindweed esté en plena floración o después. Para obtener mejores resultados, aplique a finales del verano o en otoño.		
Bittersweet, Oriental	2.25	2
Para control de oriental bittersweet, aplique este producto como aplicación al voleo en 30 a 40 galones de solución de rocio que contenga 0.25 por ciento de un surfactante no iónico y 0.1 por ciento de organosilíconos no iónicos por acre. Use una concentración de 0.5 a 2 por ciento por volumen de surfactante no iónico cuando use un rociador manual y la técnica de rocio para mojar. Para obtener mejores resultados, asegúrese de cubrir completamente la planta objetivo con la solución de rocio.		
Bluegrass, Kentucky	1.5 – 2.3	0.75
Aplique cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de bota a floración. Cuando la aplicación se hace antes de la etapa de bota, el control puede verse reducido. En el otoño, aplique el tratamiento antes de que las plantas se oscurezcan.		
Blueweed, Texas	2.3 – 3.75	1.5
Aplique de 3 a 3.75 cuartos de galón de este producto por acre al oeste del río Mississippi y de 2.3 a 3 cuartos de galón por acre al este del río Mississippi cuando la mayoría de las plantas objetivo estén en plena floración o después. Para obtener mejores resultados, aplique a finales del verano o en otoño.		
Brackenfern	2.3 – 3	0.75 – 1
Aplique a las frondas completamente extendidas que tengan por lo menos 18 pulgadas de longitud.		
Bromegrass, smooth	1.5 – 2.3	0.75
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de bota a floración. Cuando la aplicación se hace antes de la etapa de bota, el control puede verse reducido. En el otoño, aplique el tratamiento antes de que las plantas se oscurezcan.		
Bursage, woolly-leaf	—	1.5
Canarygrass, reed	1.5 – 2.3	0.75
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de bota a floración. Cuando la aplicación se hace antes de la etapa de bota, el control puede verse reducido. En el otoño, aplique el tratamiento antes de que las plantas se oscurezcan.		
Cattail	2.3 – 3.75	0.75
Aplique este producto cuando las plantas objetivo estén en crecimiento activo y estén en la etapa de floración temprana o completa o después de esta. Se obtienen mejores resultados cuando las aplicaciones se realizan durante los meses de verano o otoño.		
Clover; red, white	2.3 – 3.75	1.5
Cogongrass	2.3 – 3.75	1.5
Aplique este producto a finales del verano o en otoño cuando las plantas de cogongrass tengan por lo menos 18 pulgadas de alto y estén en crecimiento activo. Debido a las etapas de crecimientos irregulares y la naturaleza densa de la vegetación de cogongrass, pueden ser necesarias varias aplicaciones para lograr el control.		
Cordgrass	2 – 8	5 – 8
Antes de aplicar este producto para controlar cordgrass, inspeccione la zona para determinar si existen lechos de crustáceos dentro de la zona de aplicación. Si se pretende recolectar crustáceos en la zona, demore la aplicación de este producto hasta después de la recolección o mantenga una zona de transición de 50 pies entre el área de aplicación y los lechos de crustáceos comerciales o no recolecte los crustáceos hasta por lo menos 14 días después de aplicar este producto. Vea las restricciones abajo. Las condiciones ideales para controlar cordgrass son cuando las plantas no tienen lodo ni desechos y están en crecimiento activo, y se puede conseguir una buena cobertura del rocio. La presencia de desechos o lodo en la superficie de cordgrass reducirá el rendimiento del producto. Para una mejor captación del herbicida, lave las plantas objetivo antes de aplicar y espere como mínimo 4 horas para que las plantas se sequen antes de aplicar este producto. Cuando cordgrass ha sido cortado antes de la aplicación, espere que vuelva a crecer lo suficiente antes de aplicar este producto para asegurar una intercepción y captación adecuadas de este producto. La lluvia o la inmersión de la planta en agua de marea antes de transcurrir 4 horas de la aplicación puede reducir la eficacia de este producto.		
Aplique de 2 a 8 cuartos de galón de este producto por acre usando equipo de aplicación terrestre al voleo o con sensor óptico en 5 a 100 galones de solución de rocio o en 5 a 10 galones de solución de rocio por acre si se usa equipo de aplicación aérea.		
Aplique una solución de 5 a 8 por ciento de este producto al usar rociadores manuales de mochila o rociador de alto volumen. Realice todas las aplicaciones de este producto para control de cordgrass en una solución de rocio que contenga 0.25% o más (1 o más cuartos de galón por 100 galones de solución de rocio) de un surfactante no iónico u otro coadyuvante que sea compatible con este producto y esté indicado en la etiqueta para usar con herbicidas y aprobado para usar en sitios acuáticos. Para obtener mejores resultados, asegúrese de conseguir una cobertura completa de los macizos de cordgrass.		
RESTRICIONES: Si se mantiene una zona de transición de 50 pies entre el área de aplicación y los lechos de crustáceos comerciales, no hay restricciones a la recolección de crustáceos. Si se aplica dentro de una zona de 50 pies de los lechos de crustáceos comerciales, NO recolecte los crustáceos hasta por lo menos 14 días después de aplicar este producto.		
Cutgrass, giant*	3	1
Se necesitará más de una aplicación de este producto para lograr el control, especialmente donde la vegetación esté parcialmente sumergida en el agua. Permita que las malezas que son el objetivo crezcan hasta la etapa de 7 a 10 hojas antes de realizar la siguiente aplicación.		

TABLA DE PROPORCIONES PARA MALEZAS PERENNES

Especies de maleza	Proporción por difusión (cuartos de galón/acre)	Concentración del rocio para mojar en rociador de mano (% solución)
Dallisgrass	2.3 – 3.75	1.5
Dandelion	2.3 – 3.75	1.5
Dock, curly	2.3 – 3.75	1.5
Dogbane, hemp	3	1.5
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de brotación tardía a floración. Para obtener mejores resultados, aplique a finales del verano o en otoño.		
Fescue (excepto tall)	2.3 – 3.75	1.5
Fescue, tall	2.3	1
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de crecimiento de bota a floración. Si se aplica antes de la etapa de bota, puede obtenerse un menor control del deseado.		
Guinea grass	2.3	0.75
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de crecimiento de 7 hojas.		
Hemlock, poison	1.5 – 3	0.75 – 1.5
También se puede lograr el control inyectando 5 mililitros de una solución al 5 por ciento de este producto usando un dispositivo de inyección manual en una caña de una hoja por planta, 12 pulgadas por encima de la corona de la raíz. ¹ No se requiere surfactante.		
Hogweed, giant	—	—
Inyecte 5 mililitros de una solución al 5 por ciento de este producto en una caña de una hoja por planta, 12 pulgadas por encima de la corona de la raíz. ¹ No se requiere surfactante.		
Horsenettle	2.3 – 3.75	1.5
Horseradish	3	1.5
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de brotación tardía a floración. Para obtener mejores resultados, aplique a finales del verano o en otoño.		
Horsetail, field	—	—
Inyecte 0.5 mililitros de este producto por tallo directamente en el tallo de la planta, un segmento por encima de la corona de la raíz. ¹ No se requiere surfactante.		
Iceplant	1.5	1.5
Iris, yellow flag	—	—
Corte los tallos de flores 8 o 9 pulgadas por encima de la corona de la raíz. Introduzca una aguja inyectora en el centro del tallo y luego retírela lentamente a medida que inyecta 0.5 mililitros de este producto con un inyector manual. ¹ No se requiere surfactante.		
Ivy, cape, German	1.5 – 3	0.75 – 1.5
Jerusalem artichoke	2.3 – 3.75	1.5
Johnsongrass	1.5 – 2.3	0.75
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de bota a floración o antes de que las plantas se hayan oscurecido en el otoño. Cuando se aplica antes de la etapa de bota, el control puede verse reducido.		
Kikuyu grass	1.5 – 2.3	0.75
Knapweed	3	1.5
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de brotación tardía a floración. Para obtener mejores resultados, aplique a finales del verano o en otoño.		
Knotweed; Bohemian, giant, Japanese	3	2
Aplique 3 cuartos de galón de este producto por acre como aplicación al voleo en 3 a 40 galones de solución de rocio con 0.5 a 1 por ciento por volumen de un surfactante no iónico. Para aplicar usando un rociador de mochila y la técnica de rocio para mojar, aplique una solución al 2 por ciento de este producto que contenga de 0.5 a 2 por ciento por volumen de un surfactante no iónico. Para obtener mejor control, no altere la vegetación en el área de aplicación con un mínimo de 7 días después de la aplicación. También se puede obtener control al hacer un corte limpio de los tallos justo por debajo del segundo o tercer nodo sobre la superficie y aplicar 0.36 onzas líquidas (10 mililitros) de una solución al 50 por ciento de este producto en agua en el "pozo" o internodo que quede. Asegúrese de que los restos de la parte superior de la planta que se eliminó se recogen y desechen correctamente para evitar que se propaguen nuevas plantas de los restos. El uso de biobarreras, tales como paneles de cartón, madera contrachapada o plástico, ayudará a evitar la propagación de materia vegetal. La proporción de aplicación total combinada de este producto no puede exceder 8 cuartos de galón por acre. ¹ También se puede lograr el control inyectando 5 mililitros de este producto por tallo en el segundo o tercer internodo usando un dispositivo de inyección manual. ¹ No se requiere surfactante.		
Lantana	—	0.75 – 1
Aplique cuando la mayoría de las plantas se encuentren en la etapa de floración o después de ella. Utilice la concentración más alta de solución de rocio para plantas que han alcanzado la etapa de crecimiento leñoso.		
Lespedeza	2.3 – 3.75	1.5
Loosestrife, purple	2	1 – 1.5
Aplique cuando la mayoría de las plantas se encuentren en la etapa de floración o después de ella. Se pueden obtener mejores resultados cuando la aplicación se realiza durante los meses de verano o de otoño. La aplicación en otoño debe hacerse antes de una helada agresiva.		
Lotus, American	2	0.75
Aplique cuando la mayoría de las plantas se encuentren en la etapa de floración o después de ella. Se pueden obtener mejores resultados cuando la aplicación se realiza durante los meses de verano o de otoño. La aplicación en otoño debe hacerse antes de una helada agresiva. Puede ser necesaria más de una aplicación de este producto para controlar el crecimiento de semillas y partes de plantas subterráneas.		
Maidencane	3	0.75
Se necesitará más de una aplicación de este producto para lograr el control, especialmente para la vegetación parcialmente sumergida en el agua. Permita que las plantas crezcan hasta la etapa de 7 a 10 hojas antes de realizar la siguiente aplicación.		
Milkweed, común	2.3	1.5
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de brotación tardía a floración.		
Muhly, wirestem	1.5 – 2.3	0.75
Aplique cuando la mayoría de las plantas objetivo tengan por lo menos 8 pulgadas de alto (etapa de desarrollo de 3 a 4 hojas) y estén en crecimiento activo.		
Mullein, común	2.3 – 3.75	1.5
Napigrass	2.3 – 3.75	1.5
Nightshade, silverleaf	2.3 – 3.75	1.5
Aplique de 3 a 3.75 cuartos de galón de este producto por acre como aplicación al voleo al oeste del río Mississippi y de 2.3 a 3 cuartos de galón por acre al este del río Mississippi cuando la mayoría de las plantas objetivo estén en plena floración o después. Se pueden obtener mejores resultados cuando la aplicación se realiza a finales del verano o en otoño, después de la formación de frutos.		
Nutsedge; púrpura, amarillo	2.3	0.75
Aplique este producto para controlar las plantas existentes de nutsedge y las nueces inmaduras adjuntas cuando las plantas objetivo están en flor o cuando se pueden encontrar nueces nuevas en las puntas de los rizomas. No se podrán controlar las nueces que todavía no han germinado y será necesario repetir las aplicaciones de este producto para lograr el control a largo plazo.		

TABLA DE PROPORCIONES PARA MALEZAS PERENNES

Especies de maleza	Proporción por difusión (cuartos de galón/acre)	Concentración del rocío para mojar en rociador de mano (% solución)
Orchardgrass	1.5 – 2.3	0.75
Aplique cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de bota a floración. Cuando se aplica antes de la etapa de bota, puede obtenerse un menor control del deseado. En el otoño, aplique el tratamiento antes de que las plantas se oscurezcan.		
Pampas grass	2.3 – 3.75	1.5
Para grass	3	0.75
Se necesitará más de una aplicación de este producto para lograr el control total. Permita que las plantas crezcan hasta la etapa de 7 a 10 hojas antes de realizar la siguiente aplicación.		
Pepperweed, perenne	3	1.5
Phragmites*	2 – 3.75	0.75 – 1.5
Para el control parcial de phragmites en Florida y en los condados de otros estados que bordean el Golfo de México, aplique 3.75 cuartos de galón de este producto por acre como aplicación al voleo o una solución al 1.5 por ciento usando un rociador de mano. En otras áreas de los EE. UU., aplique de 2 a 3 cuartos de galón por acre como aplicación al voleo o, para control parcial, aplique una solución al 0.75 por ciento usando un rociador de mano. Para obtener mejores resultados, aplique a finales del verano o en otoño cuando las plantas están en crecimiento activo y en plena floración. Debido a la naturaleza densa de la vegetación (que puede impedir la correcta cobertura del rocío) y a las etapas de crecimiento irregulares, puede ser necesaria más de una aplicación de este producto para lograr el control. Los síntomas visuales de control se desarrollarán con lentitud.		
Quackgrass	1.5 – 2.3	0.75
Aplique este producto cuando la mayoría de las plantas objetivo tengan por lo menos 8 pulgadas de alto (etapa de desarrollo de 3 a 4 hojas) y estén en crecimiento activo.		
Redvine*	1.5	1.5
Reed; común, gigante	3 – 3.75	1.5
Para obtener mejores resultados, aplique a finales del verano o en otoño. También se puede lograr el control inyectando 5 mililitros de este producto concentrado (sin diluir) directamente en el segundo o tercer internodo usando un dispositivo de inyección manual. ¹ No se requiere surfactante.		
Ryegrass, perenne	1.5 – 2.3	0.75
Aplique este producto cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de crecimiento de bota a floración. Cuando se aplica antes de la etapa de bota, el control puede verse reducido. En el otoño, aplique el tratamiento antes de que el ryegrass sea oscureza.		
Salvinia, giant	3 – 3.75	2
Aplique una solución al 2 por ciento de este producto que contenga de 0.5 a 2 por ciento por volumen de un surfactante no iónico aprobado para uso acuático y que contenga por lo menos 70 por ciento de ingrediente activo usando la técnica de rocío para mojar. Para aplicación al voleo, aplique de 3 a 3.75 cuartos de galón de este producto por acre en 3 a 40 galones de solución de rocío que contenga 0.1 por ciento por volumen de organosilicano y 0.25 por ciento de surfactante no iónico o mezcla de rocío coadyuvante (spreader sticker) aprobado para uso acuático. Deje transcurrir al menos 3 días después de la aplicación antes de alterar la vegetación en el área de aplicación. Este producto no controlará plantas que estén completamente sumergidas o que tienen la mayoría de su follaje debajo del agua.		
Smartweed, swamp	2.3 – 3.75	1.5
Spatterdock	3	0.75
Aplique cuando la mayoría de las plantas objetivo estén en plena floración. Para obtener mejores resultados, aplique en verano o en otoño.		
Spurge, leafy*	–	1.5
Starthistle, amarillo	–	1.5
Sweet potato, wild*	–	1.5
Aplique cuando la mayoría de las plantas objetivo se encuentren en la etapa de floración o después de ella. Puede ser necesaria más de una aplicación para el control total.		
Thistle, artichoke	1.5 – 2.3	2
Aplique cuando la mayoría de las plantas objetivo se encuentren en la etapa de brotación o después de ella.		
Thistle, Canada	1.5 – 2.3	1.5
Aplique cuando la mayoría de las plantas objetivo se encuentren en la etapa de brotación o después de ella. También puede obtener control con inyecciones al tallo. Corte de 8 a 9 plantas de las más altas en un macizo en la etapa de brotación. Introduzca una aguja inyectora en el centro del tallo y luego retírela lentamente a medida que inyecta 0.5 mililitros de este producto concentrado en el tallo. ¹ No requiere surfactante.		
Timothy	1.5 – 2.3	1.5
Aplique cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de bota a floración. Si la aplicación se hace antes de la etapa de bota, el control puede verse reducido. En el otoño, aplique el tratamiento antes de que las plantas se oscurezcan.		
Torpedograss*	3 – 3.75	0.75 – 1.5
Aplique este producto en una proporción o concentración de solución de rocío menor dentro del rango especificado cuando torpedograss crece en el terreno y en una proporción o concentración mayor dentro del rango cuando está parcialmente sumergido en agua o creciendo como mata flotante. Se necesitarán aplicaciones adicionales de este producto para mantener el control.		
Trumpetcreeper*	1.5 – 2.3	1.5
Tules, común	–	1.5
Aplique a las plantas objetivo cuando se encuentren en la etapa de brotación o después de ella. Los síntomas visuales aparecerán lentamente y puede que no aparezcan hasta 3 semanas o más después de la aplicación.		
Vaseygrass	2.3 – 3.75	1.5
Velvetgrass	2.3 – 3.75	1.5
Waterhyacinth	2.5 – 3	0.75 – 1
Aplique cuando las plantas objetivo se encuentren en la etapa de floración temprana o después de ella. Los síntomas visuales pueden tardar en aparecer 3 o más semanas después de la aplicación, y la necrosis completa y descomposición de 60 a 90 días después de la aplicación. Si desea obtener los efectos visuales más rápido, use una proporción de aplicación más alta dentro del rango indicado.		
Waterlettuce	–	0.75 – 1
Aplique una solución al 1 por ciento de este producto en áreas de infestación severa. Se pueden obtener mejores resultados si se aplica de mediados del verano hasta el invierno. Si se aplica en primavera, es posible que se necesite más de una aplicación para lograr el control.		
Waterprimrose	–	0.75
Realice la aplicación a plantas objetivo que se encuentren en etapa de floración o después de ella, pero antes de que cambien de color en el otoño. Para obtener un mejor control es necesaria una cobertura completa.		
Wheatgrass, western	1.5 – 2.3	0.75
Aplique cuando la mayoría de las plantas objetivo hayan alcanzado la etapa de desarrollo de bota a floración. Las aplicaciones realizadas antes de la etapa de bota podrían tener menor control. En el otoño, aplique el tratamiento antes de que las plantas se oscurezcan.		

* Control parcial
1 Al usar inyecciones de tallo, el uso total combinado de este producto no debe exceder 8 cuartos de galón por acre por año. A 5 mililitros de producto concentrado (sin diluir) por tallo, 8 cuartos de galón tratarán

aproximadamente 1500 tallos por acre por año. La cantidad de tallos que pueden tratarse por acre variará dependiendo del volumen de inyección y de la concentración de este producto en la solución de aplicación.

Otras perennes indicadas en esta etiqueta — Aplique de 2.3 a 3.75 cuartos de galón de este producto por acre como aplicación al voleo o una solución de 0.75 a 1.5 por ciento usando un rociador manual.

12.4 Árboles, enredaderas y matorrales leñosos

Aplique este producto a árboles y matorrales que estén en crecimiento activo después de la expansión completa de las hojas. Use una proporción de aplicación mayor dentro del rango indicado para árboles y matorrales más grandes y/o en áreas de denso crecimiento vegetativo. Para el control de enredaderas, aplique este producto en una proporción de aplicación o concentración de solución de rocío mayor dentro del rango indicado cuando las plantas objetivo hayan alcanzado la etapa de crecimiento leñoso.

Se obtiene un mejor control de árboles y matorrales leñosos cuando se realiza la aplicación a finales del verano o en otoño después de la formación de frutas. Sin embargo, en las zonas áridas, se puede obtener un mejor control cuando la aplicación se realiza en la primavera o a comienzos del verano, cuando los árboles y matorrales tienen mayor contenido de humedad y están florecidos. Se puede anticipar un control deficiente cuando este producto se aplica a árboles y matorrales sometidos a estrés por sequía.

Se aceptan algunos colores otoñales en especies de hoja caduca no deseables al aplicar este producto a árboles y matorrales en el otoño, siempre y cuando no se haya producido una importante caída de las hojas. El rendimiento de este producto podría verse reducido si se aplica después de una helada. Despues de aplicar en otoño, es posible que los síntomas no aparezcan antes de las heladas o del envejecimiento.

Para obtener mejores resultados, espere 7 días o más después de la aplicación para podar, cortar, labrar, quemar o eliminar los árboles, enredaderas y matorrales leñosos del sitio de la aplicación. Pueden ser necesarias aplicaciones adicionales de este producto para controlar árboles y matorrales que se regeneren a partir de semillas o partes subterráneas.

MEZCLAS DE TANQUE: Este producto puede aplicarse en cualquier proporción indicada en esta etiqueta en una mezcla de tanque con los siguientes productos para aumentar el espectro de control de malezas herbáceas, árboles, enredaderas y matorrales leñosos. Para el control de las malezas herbáceas, aplique el producto de la mezcla de tanque en la proporción de aplicación o concentración de solución de rocío más baja dentro del rango especificado. Para el control de poblaciones densas o de árboles, enredaderas y matorrales leñosos difíciles de controlar, aumente la proporción de aplicación o la concentración de solución de rocío del producto en la mezcla de tanque hacia el extremo más alto del rango. Consulte las etiquetas de cada producto para conocer los usos aprobados y las proporciones de aplicación. No todos los productos en mezcla de tanque están aprobados para uso acuático.

Arsenal; Herbicida concentrado para aplicadores Arsenal; Escort XP; Forestry Garlon 4 Specialty; Forestry Garlon XRT Specialty; Garlon 3A Specialty; Garlon 4 Specialty; Garlon 4 Ultra Specialty; Vastlan Specialty; imazapyr; metsulfuron methyl; triclopyr

Asegúrese de que la cantidad correcta del herbicida Garlon esté bien mezclada con agua en el tanque de rociado antes de agregar este producto.

Aplicación a tocones cortados

Este producto se puede usar para controlar rebrotos y retoños de matorrales leñosos y árboles en cualquier sitio indicado en esta etiqueta.

Corte el árbol o matorral leñoso cerca de la superficie de la tierra o del agua y aplique inmediatamente una solución de este producto al 50 o 100 por ciento (sin diluir) a la superficie recién cortada utilizando un aplicador capaz de aplicar este producto a todo el cámbrum. La demora en la aplicación puede resultar en un rendimiento inferior. Para obtener mejores resultados, corte el árbol o matorral leñoso durante el período de crecimiento activo y expansión completa de las hojas y aplique este producto. No se necesita surfactante para la aplicación a tocones cortados.

Para controlar tree of heaven (*Ailanthus altissima*), corte el árbol cerca de la superficie de la tierra y aplique de inmediato una solución al 50 por ciento de este producto (16 onzas líquidas por cuarto de galón de solución) y un 10 por ciento de herbicida Arsenal (de 3 a 4 onzas líquidas por cuarto de galón de solución) en agua a la superficie recién cortada.

NO REALICE UNA APLICACIÓN EN TOCONES CORTADOS CUANDO LAS RAÍCES DE MATORRALES LEÑOSOS O ÁRBOLES DESEABLES PUEDEN ESTAR INERTADAS EN LAS RAÍCES DEL TOCÓN CORTADO, PORQUE SE PUEDE CAUSAR DAÑO A LOS ÁRBOLES ADYACENTES. Algunos retoños, tallos o árboles pueden compartir el mismo sistema de raíces. Los árboles adyacentes de edad, altura y espacio similares pueden tener raíces compartidas. Ya sea injertados o compartidos, es probable que se dañen tallos o árboles adyacentes cuando se aplica este producto a uno o más árboles que comparten un sistema común de raíces.

Aplicación de inyección y anillado de matorrales leñosos y árboles

Este producto se puede usar para controlar árboles y matorrales leñosos indicados en esta sección por aplicación de inyección o anillado (frill) en cualquier sitio acuático o terrestre indicado en esta etiqueta.

Inyecte o aplique el equivalente 1 mililitro (0.04 onzas líquidas) de este producto por cada 2 ó 3 pulgadas de diámetro del tronco a la altura del pecho (DBH en inglés). Si inyecta este producto en un matorral leñoso o árbol, use equipo capaz de penetrar el tejido vivo de la planta debajo de la corteza. No se requiere surfactante para la inyección directa de este producto en árboles y matorrales leñosos.

Para aplicación con anillado, aplique una solución de 50 a 95 por ciento de este producto en agua con 0.5% o más por volumen de un surfactante no iónico a una incisión anular continua alrededor del árbol o en cortes espaciados uniformemente alrededor del árbol por debajo del nivel de las ramas. A medida que el diámetro del árbol aumenta, pueden obtenerse mejores resultados al aplicar este producto a una incisión anular continua o en cortes menos espaciados. Evite las técnicas de aplicación que permiten que este producto se escorra de las áreas cortadas o con incisiones. En las especies que segregan savia copiosamente, haga los cortes o incisiones en un ángulo oblicuo para producir un efecto de copa y aplicar una solución al 95 por ciento de este producto con un surfactante no iónico, como se describe antes. Para obtener mejores resultados, realice esta aplicación durante el período de crecimiento activo y después de la expansión completa de las hojas.

Aplicación modificada de alto volumen y bajo volumen con mochila

Para el control total y parcial de árboles, enredaderas y matorrales leñosos indicados en esta etiqueta al usar un rociador de mochila u otro equipo manual y una técnica de aplicación foliar dirigida de bajo volumen, aplique una solución de 4 a 8 por ciento de este producto que contenga de 0.5 a 1 por ciento por volumen de un surfactante no iónico de forma uniforme sobre la corona de la planta para cubrir el 50 por ciento del follaje superior de los árboles, enredaderas y matorrales leñosos no deseados.

TABLA DE PROPORCIONES PARA MATORRALES LEÑOSOS, ÁRBOLES Y ENREDADERAS

Especie	Proporción por difusión (cuartos de galón/acre)	Concentración del rocio para mojar en rociador de mano (% solución)
Alder	2.3 – 3	0.75 – 1.2
Ash*	1.5 – 3.75	0.75 – 1.5
Aspen, quaking	1.5 – 2.3	0.75 – 1.2
Bearclover (Bearmat)*	1.5 – 3.75	0.75 – 1.5
Beech*	1.5 – 3.75	0.75 – 1.5
Birch	1.5	0.75
Blackberry	2.3 – 3	0.75 – 1.2
Blackgum	1.5 – 3.75	0.75 – 1.5
Bracken	1.5 – 3.75	0.75 – 1.5
Broom; French, Scotch	1.5 – 3.75	1.2 – 1.5
Buckwheat, California*	1.5 – 3	0.75 – 1.5
Cascara*	1.5 – 3.75	0.75 – 1.5
Castor bean	1.5 – 3.75	1.5
Además, para controlar, inyecte 4 mililitros de este producto concentrado (sin diluir) por planta directamente en la parte inferior del tallo principal con un dispositivo de inyección manual. ¹ No requiere surfactante.		
Catsclaw*	—	1.2 – 1.5
Para control parcial, aplique este producto cuando por lo menos el 50 por ciento de las hojas nuevas estén completamente desarrolladas.		
Ceanothus*	1.5 – 3.75	0.75 – 1.5
Chamise*	1.5 – 3.75	0.75
Cerezo; amargo, negro, pin	1.5 – 3.75	1 – 1.5
Cottonwood, eastern	1.5 – 3.75	0.75 – 1.5
Coyote brush	2.3 – 3	1.2 – 1.5
Para controlar, aplique este producto cuando por lo menos el 50 por ciento de las hojas nuevas estén completamente desarrolladas.		
Cypress; swamp, bald	1.5 – 3.75	0.75 – 1.5
Deerweed	1.5 – 3.75	0.75 – 1.5
Dewberry	2.3 – 3	0.75 – 1.2
Dogwood*	3 – 3.75	1 – 2
Elderberry	1.5	0.75
Elm*	1.5 – 3.75	0.75 – 1.5
Eucalipto, blue gum	—	1.5
Para controlar nuevos brotes de eucaliptos, aplique este producto usando un rociador manual cuando los nuevos brotes tengan entre 6 a 12 pies de altura. Asegúrese de conseguir una cobertura completa.		
Gallberry	1.5 – 3.75	0.75 – 1.5
Gorse*	1.5 – 3.75	0.75 – 1.5
Hackberry, western	1.5 – 3.75	0.75 – 1.5
Hasardia*	1.5 – 3	0.75 – 1.5
Hawthorn	1.5 – 2.3	0.75 – 1.2
Hazel	1.5	0.75
Hickory*	3 – 3.75	1 – 2
Honeysuckle	2.3 – 3	0.75 – 1.2
Hornbeam, American*	1.5 – 3.75	0.75 – 1.5
Huckleberry	1.5 – 3.75	0.75 – 1.5
Ivy, poison	3 – 3.75	1.5
Kudzu	3	1.5
Locust, black*	1.5 – 3	0.75 – 1.5
Madrone resprouts (rebrotos)	—	1.5
Magnolia, sweetbay	1.5 – 3.75	0.75 – 1.5
Manzanita*	1.5 – 3.75	0.75 – 1.5
Maple, red	1 – 3.75	0.75 – 1.2
Para controlar, aplique una solución de 0.75 a 1.2 por ciento de este producto usando un rociador manual cuando las hojas estén completamente desarrolladas. Para control parcial, aplique de 1 a 3.75 cuartos de galón por acre en aplicación al voleo.		
Maple, sugar	—	0.75 – 1.2
Para controlar, aplique este producto con un rociador manual cuando por lo menos el 50 por ciento de las hojas nuevas estén completamente desarrolladas.		
Maple, vine*	1.5 – 3.75	0.75 – 1.5
Monkey flower*	1.5 – 3	0.75 – 1.5
Oak; black, white*	1.5 – 3	0.75 – 1.5
Oak; northern, pin	1.5 – 3	0.75 – 1.2
Para controlar, aplique este producto cuando por lo menos el 50 por ciento de las hojas nuevas estén completamente desarrolladas.		
Oak, poison	3 – 3.75	1.5
Puede que tenga que repetir las aplicaciones para lograr el control. La aplicación en otoño debe hacerse antes de que las hojas pierdan su color verde.		
Oak, post	2.3 – 3	0.75 – 1.2
Oak, red	—	0.75 – 1.2
Para controlar, aplique este producto con un rociador manual cuando por lo menos el 50 por ciento de las hojas nuevas estén completamente desarrolladas.		
Oak, scrub*	1.5 – 3	0.75 – 1.5
Oak, southern red	1.5 – 3.75	1 – 1.5
Orange, Osage	1.5 – 3.75	0.75 – 1.5
Peppertree, Brazilian (Florida holly)*	1.5 – 3.75	1.5

TABLA DE PROPORCIONES PARA MATORRALES LEÑOSOS, ÁRBOLES Y ENREDADERAS

Especie	Proporción por difusión (cuartos de galón/acre)	Concentración del rocio para mojar en rociador de mano (% solución)
Persimmon*	1.5 – 3.75	0.75 – 1.5
Pine	1.5 – 3.75	0.75 – 1.5
Poplar, amarillo*	1.5 – 3.75	0.75 – 1.5
Prunus	1.5 – 3.75	1 – 1.5
Raspberry	2.3 – 3	0.75 – 1.2
Redbud, eastern	1.5 – 3.75	0.75 – 1.5
Redcedar, eastern	1.5 – 3.75	0.75 – 1.5
Rose, multiflora	1.5	0.75
Realice las aplicaciones antes de que los insectos que se alimentan de hojas deterioren las hojas.		
Russian olive*	1.5 – 3.75	0.75 – 1.5
Sage, black	1.5 – 3	0.75
Sage, white*	1.5 – 3	0.75 – 1.5
Sagebrush, California	1.5 – 3	0.75
Salmonberry	1.5	0.75
Saltbush	—	1
Saltcedar*	3 – 3.75	1 – 2

Para el control parcial, aplique una solución de 1 a 2 por ciento de este producto usando un rociador manual o de 3 a 3.75 cuartos de galón por acre en aplicación al voleo. Para controlar, aplique una solución de 1 a 1.5 por ciento de este producto en una mezcla de tanque con herbicida Arsenal o Herbicida concentrado para aplicadores Arsenal usando un rociador manual. Para controlar con aplicación al voleo, aplique 1.5 cuartos de galón de este producto por acre en una mezcla de tanque con una proporción apropiada de herbicida Arsenal o Herbicida concentrado para aplicadores Arsenal para plantas de hasta 6 pies de alto. Para controlar plantas de saltcedar mayores de 6 pies de alto con aplicación al voleo, aplique 3 cuartos de galón de este producto por acre en una mezcla de tanque con una proporción más alta de herbicida Arsenal o Herbicida concentrado para aplicadores Arsenal.

Sassafras*	1.5 – 3.75	0.75 – 1.5
Sea Myrtle	—	1
Sourwood*	1.5 – 3.75	0.75 – 1.5
Sumac; laurel, poison, smooth, sugarbush, winged*	1.5 – 3	0.75 – 1.5
Sweetgum	1.5 – 2.3	0.75 – 1.5
Swordfern*	1.5 – 3.75	0.75 – 1.5
Tallowtree, Chinese	—	0.75
Tan oak (rebrotos)*	—	1.5
Thimbleberry	1.5	0.75
Tobacco, tree*	1.5 – 3	0.75 – 1.5
Toyon*	—	1.5
Trumpet creeper	1.5 – 2.3	0.75 – 1.2
Vine maple*	1.5 – 3.75	0.75 – 1.5
Virginia creeper	1.5 – 3.75	0.75 – 1.5
Waxmyrtle, southern*	1.5 – 3.75	1.5
Willow	2.3	0.75
Yerba Santa, California*	—	1.5

* Control parcial

Otros árboles y matorrales leñosos indicados en esta etiqueta – Para control parcial, aplique de 1.5 a 3.75 cuartos de galón de este producto por acre como aplicación al voleo o una solución al 0.75 o 1.5 por ciento usando un rociador manual y la técnica de rocio para mojar.

13.0 LIMITES EN LA GARANTÍA Y LA RESPONSABILIDAD

Monsanto Company (la "Compañía") garantiza que este producto concuerda con la descripción química de la etiqueta. HASTA EL GRADO QUE SEA COMPATIBLE CON LA LEGISLACIÓN PERTINENTE, NO SE HACE NINGUNA OTRA GARANTÍA EXPRESA O IMPLÍCITA ACERCA DE LA IDONEIDAD PARA UN USO PARTICULAR O COMERCIALIDAD. Esta garantía está sujeta también a las condiciones y limitaciones que aquí se indican.

El comprador y todos los usuarios utilizarán este producto únicamente con los propósitos y de acuerdo con la etiqueta de las Instrucciones completas para el uso ("Instrucciones") y notificarán de inmediato a la Compañía si tienen alguna reclamación que se base en un contrato, negligencia, estricta responsabilidad u otros derechos extracontractuales.

Hasta el grado que sea compatible con la legislación pertinente, el comprador y todos los usuarios son responsables por todas las pérdidas, lesiones o daños que resultasen por el uso o manipulación en condiciones que estén más allá del control de esta Compañía, incluyendo sin limitarse a: incompatibilidad con productos que no sean los señalados en las Instrucciones, aplicación o contacto con vegetación que no se quiera destruir, daño a cultivos o la incapacidad del producto para controlar los biotipos de malezas que desarrollan resistencia al glifosato, condiciones climáticas inusuales, condiciones climáticas fuera de los límites que se consideran normales en el lugar de la aplicación y para el período de tiempo en el cual se aplica el producto, así como condiciones climáticas que estén fuera de los límites indicados en las Instrucciones, uso y/o aplicación que no estén explícitamente aconsejadas en las Instrucciones o no sean compatibles con estas, condiciones de humedad que estén fuera de los límites establecidos en las Instrucciones, o la presencia de productos en la tierra o sobre ella, en los cultivos o en la vegetación que se está tratando, diferentes a los indicados en las Instrucciones.

Esta Compañía no garantiza ninguno de los productos reformulados o reempacados de este producto, excepto de acuerdo a los requisitos de la administración de esta Compañía y con el permiso escrito expreso de esta Compañía.

HASTA EL GRADO QUE SEA COMPATIBLE CON LA LEGISLACIÓN PERTINENTE, LA ÚNICA Y EXCLUSIVA COMPENSACIÓN AL USUARIO O COMPRADOR Y EL LÍMITE DE RESPONSABILIDAD DE ESTA COMPAÑÍA O DE

CUALQUIER OTRO VENDEDOR POR CUALQUIER PÉRDIDA O POR TODAS LAS PÉRDIDAS, PERJUICIOS O DAÑOS QUE RESULTASEN DEL USO O MANEJO DE ESTE PRODUCTO (INCLUYENDO RECLAMOS QUE SE BASEN EN UN CONTRATO, NEGLIGENCIA, ESTRICTA RESPONSABILIDAD U OTROS DERECHOS EXTRACONTRACTUALES), SERÁ EL PRECIO PAGADO POR EL USUARIO O EL COMPRADOR POR LA CANTIDAD INVOLUCRADA DE ESTE PRODUCTO O, A ELECCIÓN DE ESTA COMPAÑÍA O DE OTRO VENDEDOR, EL REEMPLAZO DE DICHA CANTIDAD, O SI NO SE OBTUVO MEDIANTE COMPRA SE REEMPLAZARÁ DICHA CANTIDAD DEL PRODUCTO. HASTA EL GRADO QUE SEA COMPATIBLE CON LA LEGISLACIÓN PERTINENTE, EN NINGÚN CASO ESTA COMPAÑÍA U OTRO VENDEDOR SERÁN RESPONSABLES POR DAÑOS INCIDENTALES, CONSECUENTES O ESPECIALES.

En el momento de abrir y usar el producto, se asume que el comprador y todos los usuarios han aceptado las condiciones de los **LIMITES EN LA GARANTÍA Y LA RESPONSABILIDAD** que no pueden variar por medio de ningún acuerdo verbal o escrito. Si las condiciones son inaceptables, devuelva el producto inmediatamente sin abrir el envase.

Certainty, Monsanto y el diseño de la enredadera (Vine Design), Outrider, Roundup, Roundup Custom y su diseño, y TRUEBLUE ADVANTAGE PROVEN RELIABLE SUPPORTED y su diseño, son marcas registradas de Monsanto Technology LLC. Todas las demás marcas registradas son propiedad de sus respectivos dueños.

Nº. Reg. EPA 524-343

En caso de emergencia relacionada con este producto o si necesita ayuda médica, llame por cobrar, de día o de noche, al (314) 694-4000.



©2018

Envasado para:

MONSANTO COMPANY

800 N. LINDBERGH BLVD.

ST. LOUIS, MISSOURI, 63167 U.S.A.