

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

February 7, 2020

Matthew Granahan Nufarm Inc. 11901 S. Austin Ave. Alsip, IL 60803

Subject: Registration Review Label Mitigation for Glufosinate

Product Name: Nufarm Leopard Herbicide EPA Registration Number: 71368-119 Application Date: May 22, 2018

Decision Number: 554513

Dear Mr. Granahan:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Glufosinate Interim Decision, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

Page 2 of 2 EPA Reg. No. 71368-119 Decision No. 554513

If you have any questions about this letter, please contact Srijana Shrestha by phone at 703-305-6471, or via email at Shrestha.srijana@epa.gov.

Sincerely,

Linda Arrington, Branch Chief

Risk Management and Implementation Branch 4

Pesticide Re-Evaluation Division

Office of Pesticide Programs

Enclosure

Nufarm Leopard® Herbicide

Nufarm Leopard Herbicide will be referred to as Leopard throughout the label.

Leopard is a non-selective herbicide that provides control of a broad spectrum of broadleaf weeds and grassy weeds. Leopard is registered for use:

- as a burndown treatment prior to planting or prior to emergence of canola, corn, cotton, sweet corn, soybean and sugar beets
- post emergence weed control herbicide to be applied on crops containing the LibertyLink® trait
- post emergence weed control in cotton when applied with a hooded sprayer in-crop
- post emergence weed control in listed tree, olives, vine, and berry crops
- applied for potato vine desiccation.

ACTIVE INGREDIENT:

Glufosinate-ammonium*....... 75.5% TOTAL 100.0%

[For < 5 Gallon Containers:] [Shake Well Before Use]

[For > 5 Gallon Containers:] [Shake Well, Agitate or Recirculate Before Use]

KEEP OUT OF REACH OF CHILDREN

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 PRECAUTIONARY STATEMENTS

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

FIRST AID			
IF ON SKIN	Take off contaminated clothing.		
OR	•Rinse skin immediately with plenty of water for 15 to 20 minutes.		
CLOTHING	Call a poison control center or doctor for treatment advice.		
IF	Call a poison control center or doctor immediately for treatment advice.		
SWALLOWED	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 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 INHALED	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 treatment advice.		
HAT I ME WINDER			

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

If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible, followed by charcoal and sodium sulfate administration.

EPA REG. NO. 71368-119 EPA EST. NO.

MANUFACTURED FOR NUFARM INC. 11901 SOUTH AUSTIN AVENUE **ALSIP, IL 60803**



NET CONTENTS: GAL. (Liters)

[Designation as "NONREFILLABLE" or "REFILLABLE" for containers >5]

[071368-00119.20190530.EPA Amendment]

Feb 07, 2020

ACCEPTED

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 71368-119

^{*}CAS Number 77182-82-2

^{**}Equivalent to 2.34 pounds of active ingredient per U.S. gallon.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if absorbed through skin, swallowed or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing and breathing vapor. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Personal Protective Equipment (PPE)

Applicators and other handlers must wear:

- · Long sleeved shirt and long pants;
- Chemical-resistant gloves such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils;
- · Shoes and socks;
- Protective eyewear (goggles, face shield or safety glasses).

All handlers must wear long-sleeve shirts, long pants, shoes, and socks.

Mixer/loaders supporting aerial applications to corn, canola, soybean, and cotton must use closed mixing/loading systems.

Mixers/loaders supporting aerial applications must wear a minimum of a NIOSH approved filtering face piece respirator with any N filter (TC-84A). You can also use other NIOSH approved particulate respirators that offer more protection.

Applicators using ground boom equipment with open cabs to treat cotton must wear long-sleeve shirts, long pants, shoes, and socks plus chemical-resistant gloves.

Mixer/loaders supporting ground boom applications corn, canola, soybean, cotton, citrus fruit, pome fruit, stone fruit, and olives must wear long-sleeve shirts, long pants, shoes, and socks plus chemical-resistant gloves.

For spot treatments on olives, citrus, pome, and stone fruit with a mechanically pressurized handgun, applicators must wear long-sleeve shirts, long pants, shoes, and socks plus chemical-resistant gloves.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with Leopard'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.

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 Leopard. Wash the outside of gloves before removing. As soon as
 possible, wash thoroughly and change into clean clothing.

ENGINEERING CONTROLS STATEMENT

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.

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present. Do not apply 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 pesticide is toxic to vascular plants and must be used strictly in accordance with the drift and run-off precautions on this label in order to minimize off-site exposures.

Under some conditions, Leopard may have a potential to run-off to surface water or adjacent land. Where possible, use methods which reduce soil erosion, such as no till, limited till and contour plowing; these methods also reduce pesticide run-off. Use of vegetation filter strips along rivers, creeks, streams, wetlands, etc. or on the downhill side of fields where run-off could occur to minimize water run-off is recommended.

DIRECTIONS FOR USE

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

Do not use Leopard until you have read the entire label.

Do not apply Leopard 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.

In the State of New York Only: Not For Use In Nassau and Suffolk Counties.

AGRICULTURAL USE REQUIREMENTS

Use Leopard 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 intervals. The requirements in this box only apply to uses of Leopard 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 12 hours, with the following exceptions:

- The REI for workers engaged in scouting activities in soybeans is 4 days.
- The REI for workers to move irrigation piping is 7 days for all crops.

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 worn over short-sleeved shirt and short pants;
- Chemical resistant gloves such as barrier laminate, butyl rubber 14 mils, nitrile rubber >14 mils, neoprene rubber >
 14 mils, polyvinyl chloride (PVC) > 14 mils, or Viton > 14 mils, and
- Chemical resistant footwear plus socks;
- Protective eyewear (goggles, face shield or safety glasses).

IMPORTANT CROP SAFETY INFORMATION READ BEFORE USING LEOPARD

Leopard may be applied as a burndown treatment **prior to planting or prior to crop emergence** of any canola, sweet corn^[1], corn, cotton, olive, soybean or sugar beet.

POST EMERGENT TREATMENTS

Post emergence row crop applications of Leopard may be made only to crops containing LibertyLink trait, the active ingredient in Leopard. Tank mixtures of Leopard with other products may impact crop tolerance and increase risk of crop injury.

Many seed trade names are available under the LibertyLink trait, contact the seed manufacturer or seed distributor to determine if the seed variety is designated and supported to be LibertyLink.

Crops not containing the LibertyLink gene will not be tolerant to Leopard and severe crop injury and/or death may occur. Do not allow spray to contact foliage or green tissue of desirable vegetation other than crops containing LibertyLink trait to the active ingredient in Leopard.

Post emergent applications of Leopard may be applied to crops not containing the LibertyLink trait using a hooded sprayer.

TREE, NUT, VINE AND BERRY TREATMENTS

Applications to trees, vines and berries must avoid contact of Leopard solution, spray drift or mist with green bark, stems or foliage as injury may occur to trees, berries and vines. Only trunks with callused mature brown bark should be sprayed unless protected from spray contact by nonporous wraps, grow tubes or waxed containers. Contact of Leopard with parts of trees, berries or vines other than mature brown bark can result in serious damage.

[1 – Not for use in California]

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, or greenhouses.

Do not enter or allow others to enter treated areas until sprays have dried.

PRODUCT INFORMATION

Leopard is a water-soluble herbicide for application as a foliar spray for the control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds in a variety of crops.

Leopard is registered for use:

- as a burndown treatment prior to planting or prior to emergence of canola, corn, cotton, sweet corn, olive, soybean and sugar beets
- post emergence weed control herbicide to be applied on crops containing LibertyLink trait, including canola, soybean, corn, sweet corn and cotton
- post emergence weed control in cotton when applied with a hooded sprayer in-crop
- post emergence weed control in listed tree, olives, vine, and berry crops
- applied for potato vine desiccation.

Many seed trade names are available under the LibertyLink trait contact the seed manufacturer or seed distributor to determine if the seed variety is designated and supported as containing the LibertyLink trait.

It is important to always follow a responsible integrated weed management program.

Contact your local agronomic advisor for more specific information on integrated weed management in your area.

Leopard is only foliar-active with little or no activity in soil. Weeds that emerge after application will not be controlled.

Apply Leopard to actively growing weeds as described in the **WEED CONTROL FOR ROW CROPS** section to get maximum weed control. Uniform, thorough spray coverage is necessary to achieve consistent weed control. Necrosis of leaves and young shoots occur within 2 to 4 days after application under good growing conditions.

- Leopard is rainfast 4 hours after application to most weed species; therefore, rainfall within 4 hours may necessitate retreatment or may result in reduced weed control.
- Make applications between dawn and 2 hours before sunset to avoid the possibility of reduced lambsquarters and velvetleaf control.
- Consult your local Cooperative Extension Service or Nufarm, Inc. representative for guidelines on the optimum application timing for Leopard in your region.
- Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to environmental conditions such as drought, cool temperatures, or extended periods of cloudiness.
- To maximize weed control, do not cultivate from 5 days before an application to 7 days after an application.

Many seed trade names are available under the LibertyLink trait contact the seed manufacturer or seed distributor to determine if the seed variety is designated and supported as containing the LibertyLink trait.

ROTATIONAL CROP RESTRICTIONS*

Rotational crop planting intervals following application of Leopard are listed below. Failure to comply with these restrictions may result in illegal residues in rotated crops.

Rotational Crop	Plant Back Interval (Minimum Rotational Crop Planting Interval from Last Application)
Canola, Corn, Cotton, Soybeans, Sweet Corn, and Sugar beets	May be planted at any time
Root and Tuber Vegetables, Leafy Vegetables, Brassica Leafy Vegetables and Small Grains (Barley, Buckwheat, Oats, Rye, Teosinte, Triticale, and Wheat)	70 days
All other crops	180 days
*See Application Directions for Potato Vine Desiccation for Rotational Crop Restrictions	specifically after application of Leopard to potatoes

WEED RESISTANCE MANAGEMENT

For resistance management, Leopard contains a Group 10 herbicide –Glufosinate-ammonium. Any weed population may contain or develop plants naturally resistant to Leopard and other Group 10 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To delay herbicide resistance take one or more of the following steps:

• Rotate the use of Leopard or other Group 10 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.

- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- [For further information or to report suspected resistance, contact [Nufarm Technical Services] at [1-855-280-6609].]

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. 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. Do not assume that each listed weed is being controlled by this mechanisms of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredient in this product.

Suspected herbicide-resistant weeds may be identified by these indicators:

- * Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
- * A spreading patch of non-controlled plants of a particular weed species; and
- * Surviving plants mixed with controlled individuals of the same species.

INTEGRATED PEST MANAGEMENT

Nufarm recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including 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 or site systems in your area.

WEED CONTROL FOR ROW CROPS

Rates in fluid ounce of formulated product per acre for the control of weeds as shown in the weed control tables. In weed populations with mixed species, apply at a rate needed for the species targeting less than three inch weeds.

Table 1. Broadleaf Weeds Controlled (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)

(Including Glyp	hosate-, Triazine-, PPO-, ALS-,		
		22.0 FI Oz/A	29.0 – 43.0 FI Oz/A
		C=Control	C=Control
		NR = Not Advised	NR = Not Advised
Common Name	Scientific Name	S = Suppression	S = Suppression
Amaranth, Palmer	Amaranthus palmeri	NR	С
Anoda, spurred	Anoda cristata	С	С
Beggarweed, Florida	Desmodium tortuosum	С	С
Black medic	Medicago lupulina L.	С	С
Blueweed, Texas	Helianthus ciliaris DC.	С	С
Buckwheat, wild	Polygonum convolvulus	С	С
Buffalobur	Solanum cornutum	С	С
Burcucumber	Sicyos angulatus	С	С
Canola, volunteer ¹	Brassica spp.	C 1	C 1
Catchweed bedstraw (cleavers)	Galium aparine L.	С	С
Carpetweed	Mollugo verticillata	C	С
Chickweed, common	Stellaria media	C	C
Cocklebur, common	Xanthium strumarium	C	C
Copperleaf, hophornbeam	Acalypha ostryaefolia	C	C
Cotton, volunteer ¹	Gossypium spp.	C 1	C 1
Croton, tropic	Croton glandulosus	C	C
Croton, woolly	Croton capitatus	C	C
Eclipta	Eclipta alba	C	C
Devil's claw	Proboscidea Louisiana	C	C
	Erigeron annuus	C	C
Fleabane, annual	Galinsoga ciliate	C	C
Galinsoga, hairy			
Galinsoga, small flower	Galinsoga parviflora	С	С
Groundcherry, cutleaf	Physalis angulate	С	С
Geranium, cutleaf	Geranium dissectrum L.	C	С
Hempnettle	Galeopsis spp.	C C 2	C
Horsenettle, Carolina ²	Solanum carolinense		C 2
Jimsonweed	Datura stramonium	С	С
Knotweed	Polygonum spec.	С	С
Kochia	Kochia scoparia	C	С
Ladysthumb	Polygonum persicaria	С	С
Lambsquarters, common	Chenopodium album	С	С
Mallow, common	Malva spec.	С	С
Mallow, Venice	Hibiscus trionum	С	С
Marestail ³	Conyza Canadensis	S	С
Marsh-elder, annual	Iva annua	С	С
Morningglory, entireleaf	Ipomoea hederacea var.	С	С
	intergriuscula		
Morningglory, ivyleaf	Ipomoea hederacea	С	С
Morningglory, pitte	Ipomoea lacunose	С	С
Morningglory, sharppod	Ipomoea cordatotriloba	С	С
Morningglory, Smallflower	Jacquemontia tamnifolia	С	С
Morningglory, tall	Lpomoea purpurea	С	С
Mustard, wild	Sinapis arvensis	С	С
Nightshade, black	Solanum nigrum	C	C
Nightshade, eastern black	Solanum ptycanthum	C	C
Nightshade, hairy	Solanum sarrachoides	C	C
Pennycress	Thlaspi arvense	C	C
Pigweed, redroot	Amaranthus retroflexus	C	C
Pigweed, prostrate	Amaranthus blitoides	C	C
Pigweed, prostrate Pigweed, spiny	Amaranthus spinosus	C	C
Pigweed, spiriy Pigweed, smooth	Amaranthus hybridus	C	C
	i muaiaiiiius iivuliuus		1 ()

(including Glyphosate- Tri	azina. PPO. Al S. HPP	D and Auvin Desistant	D! - 4 \		
(including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)					
		22.0 FI Oz/A	29.0 – 43.0 FI Oz/A		
		C=Control	C=Control		
		NR = Not Advised	NR = Not Advised		
Common Name Scientific	Name	S = Suppression	S = Suppression		
Puncturevine Tribulus te	rrestris	С	С		
Purslane, common Portulaca	oleracea	С	С		
Pusley, Florida Richardia	scabra	S	С		
Ragweed, common Ambrosia	artemisiifolia	С	С		
Ragweed, giant Ambrosia	trifida	С	С		
Senna coffee Cassia oc	cidentalis	С	С		
Sesbania, hemp Sesbania	nerbacea	С	С		
Shepherd's-Purse Capsella k	ursa-pastoris	С	С		
Sicklepod (java bean) Senna obt	usifolia	С	С		
Sida, prickly Sida spino	sa L.	С	С		
Smartweed, Pennsylvania Polygonur	n pensylvanicum	С	С		
Smell melon Cucumis r	nelo L. var. Dudaim	С	С		
Sowthistle, annual Sonchus of	leraceus L.	С	С		
Soybeans, volunteer ¹ Glycine m	ax	C ¹	C ¹		
Spurge, prostrate Euphorbia	humifusa	С	С		
Spurge, spotted Euphorbia	maculate L.	С	С		
Starbur, bristly Acanthosp	ermum hispidum	С	С		
Sunflower, common Helianthus	annuus	С	С		
Sunflower, prairie Corythuch	a pura	С	С		
Sunflower, volunteer Girassol		С	С		
Thistle, Russian ² Salsola ka	li	S ²	C ²		
Velvetleaf Abutilon th	eophrasti	С	С		
Waterhemp, common Amarantho	ıs rudis	NR	С		
	is tuberculatos	NR	С		

Volunteer LibertyLink crops from the previous year will not be controlled.
 May require sequential applications for control.
 For optimum control apply Leopard on 6" marestail

Common Name Scientific Name C=Control NR = Not Recommended S = Suppression NR = Not Recommended S = Suppression Barley, volunteer 2 C 2 C 2 Barnyardgrass Echinochloa spec. C C Bluegrass, annual Poa annua L. C C Corn, volunteer 1 Zea mays L. C 1 C 1 Crabgrass, large 3 Digitaria sanguinalis C 3 C 3 Crabgrass, smooth 3 Digitaria ischaemum C 3 C 3 Cupgrass, woolly Eriochloa villosa C C Foxtail, bristly Setaria verticillata C C Foxtail, gjant Setaria faberi C C Foxtail, robust purple Setaria viridis C C Foxtail, yellow 3 Pennisetum glaucum C 3 C 3 Goosegrass 2 Eleusine indica C 2 C 2 Johnsongrass, seedling Sorghum halepense C C Millet, wild-proso Panicum miliaceum L. C C	Table 2. Grass Weeds Controlled			
Common NameScientific NameC=Control NR = Not Recommended S = SuppressionC=Control NR = Not Recommended S = SuppressionBarley, volunteer 2C 2C 2BarnyardgrassEchinochloa spec.C CCBluegrass, annualPoa annua L.C CCCorn, volunteer 1Zea mays L.C 1C 1Crabgrass, large 3Digitaria sanguinalisC 3C 3Crabgrass, smooth 3Digitaria ischaemumC 3C 3Cupgrass, woollyEriochloa villosaC CCFoxtail, bristlySetaria verticillataC CCFoxtail, gjantSetaria viridisC CCFoxtail, greenSetaria viridisC CCFoxtail, yellow 3Pennisetum glaucumC 3C 3Goosegrass 2Eleusine indicaC 2C 2Johnsongrass, seedlingSorghum halepenseC CCMillet, wild-prosoPanicum miliaceum L.C CC	(including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes)			
Common NameScientific NameNR = Not Recommended S = SuppressionNR = Not Recommended S = SuppressionBarley, volunteer 2C 2C 2BarnyardgrassEchinochloa spec.CCBluegrass, annualPoa annua L.CCCorn, volunteer 1Zea mays L.C 1C 1Crabgrass, large 3Digitaria sanguinalisC 3C 3Crabgrass, smooth 3Digitaria ischaemumC 3C 3Cupgrass, woollyEriochloa villosaCCFoxtail, bristlySetaria verticillataCCFoxtail, greenSetaria faberiCCFoxtail, greenSetaria viridisCCFoxtail, robust purpleSetaria viridisCCFoxtail, yellow 3Pennisetum glaucumC 3C 3Goosegrass 2Eleusine indicaC 2C 2Johnsongrass, seedlingSorghum halepenseCCJunglericeEchinochloa colonumCCMillet, wild-prosoPanicum miliaceum L.CC				29.0 – 43.0 FI Oz/A
Common NameScientific NameS = SuppressionS = SuppressionBarley, volunteer 2C 2C 2BarnyardgrassEchinochloa spec.CCBluegrass, annualPoa annua L.C CCCorn, volunteer 1Zea mays L.C 1C 1Crabgrass, large 3Digitaria sanguinalisC 3C 3Crabgrass, smooth 3Digitaria ischaemumC 3C 3Cupgrass, woollyEriochloa villosaCCFoxtail, bristlySetaria verticillataCCFoxtail, giantSetaria viridisCCFoxtail, greenSetaria viridisCCFoxtail, robust purpleSetaria viridisCCFoxtail, yellow 3Pennisetum glaucumC 3C 3Goosegrass 2Eleusine indicaC 2C 2Johnsongrass, seedlingSorghum halepenseCCMillet, wild-prosoPanicum miliaceum L.CC				
Barley, volunteer 2 Barnyardgrass Echinochloa spec. C Bluegrass, annual Poa annua L. C Corn, volunteer 1 Zea mays L. C 1 Crabgrass, large 3 Digitaria sanguinalis C 3 Crabgrass, smooth 3 Digitaria ischaemum C 3 Cupgrass, woolly Eriochloa villosa C Foxtail, bristly Setaria verticillata C Foxtail, giant Setaria faberi C Foxtail, green Setaria viridis C Foxtail, robust purple Setaria viridis C Foxtail, yellow 3 Pennisetum glaucum C 3 C 2 C 3 C 3 C 3 C 3 C 3 C 3 C 3 C 3 C 3 C 3				
Barnyardgrass		Scientific Name	S = Suppression	S = Suppression
Bluegrass, annual Poa annua L. C C Corn, volunteer 1 Zea mays L. C 1 Crabgrass, large 3 Digitaria sanguinalis C 3 Crabgrass, smooth 3 Digitaria ischaemum C 3 Cupgrass, woolly Eriochloa villosa C Foxtail, bristly Setaria verticillata C Foxtail, giant Setaria viridis C Foxtail, green Setaria viridis C Foxtail, robust purple Setaria viridis C Foxtail, yellow 3 Pennisetum glaucum C 3 Goosegrass 2 Eleusine indica C 2 Johnsongrass, seedling Sorghum halepense C Millet, wild-proso Panicum miliaceum L. C				
Corn, volunteer ¹ Zea mays L. C ¹ C ¹ Crabgrass, large ³ Digitaria sanguinalis C ³ C ³ Crabgrass, smooth ³ Digitaria ischaemum C ³ C ³ Cupgrass, woolly Eriochloa villosa C C C Foxtail, bristly Setaria verticillata C C C Foxtail, giant Setaria faberi C C C Foxtail, green Setaria viridis C C C Foxtail, robust purple Setaria viridis C C C Foxtail, yellow ³ Pennisetum glaucum C ³ C ³ Goosegrass ² Eleusine indica C ² Johnsongrass, seedling Sorghum halepense C C Millet, wild-proso Panicum miliaceum L. C				
Crabgrass, large 3 Digitaria sanguinalis C 3 C 3 Crabgrass, smooth 3 Digitaria ischaemum C 3 C 3 Cupgrass, woolly Eriochloa villosa C C Foxtail, bristly Setaria verticillata C C Foxtail, giant Setaria faberi C C Foxtail, green Setaria viridis C C Foxtail, robust purple Setaria viridis C C Foxtail, yellow 3 Pennisetum glaucum C 3 C 3 Goosegrass 2 Eleusine indica C 2 C 2 Johnsongrass, seedling Sorghum halepense C C Junglerice Echinochloa colonum C C Millet, wild-proso Panicum miliaceum L. C C		Poa annua L.		
Crabgrass, smooth ³ Digitaria ischaemum C ³ Cupgrass, woolly Eriochloa villosa C Foxtail, bristly Setaria verticillata C Foxtail, giant Setaria faberi C Foxtail, green Setaria viridis C Foxtail, robust purple Setaria viridis C Foxtail, yellow ³ Pennisetum glaucum C ³ C ³ C ³ C ³ C ³ C ⁴ C ⁵ C Foxtail, vellow ³ C				
Cupgrass, woolly Eriochloa villosa C C Foxtail, bristly Setaria verticillata C C Foxtail, giant Setaria faberi C C Foxtail, green Setaria viridis C C Foxtail, robust purple Setaria viridis C C Foxtail, yellow ³ Pennisetum glaucum C ³ C ³ Goosegrass ² Eleusine indica C ² C ² Johnsongrass, seedling Sorghum halepense C C Junglerice Echinochloa colonum C C Millet, wild-proso Panicum miliaceum L. C C	Crabgrass, large ³	Digitaria sanguinalis		
Foxtail, bristly Setaria verticillata C Foxtail, giant Setaria faberi C Foxtail, green Setaria viridis C Foxtail, robust purple Setaria viridis C Foxtail, yellow 3 Pennisetum glaucum C 3 Goosegrass 2 Eleusine indica C 2 Johnsongrass, seedling Sorghum halepense C Millet, wild-proso C C C C C C C C C C C C C	Crabgrass, smooth ³	Digitaria ischaemum		
Foxtail, giant Setaria faberi C Foxtail, green Setaria viridis C Foxtail, robust purple Setaria viridis C Foxtail, yellow 3 Pennisetum glaucum C Goosegrass 2 Eleusine indica C Junglerice Echinochloa colonum C Millet, wild-proso C C C C C C C C C C C C C	Cupgrass, woolly	Eriochloa villosa	С	
Foxtail, green Setaria viridis C C Foxtail, robust purple Setaria viridis C Foxtail, yellow ³ Pennisetum glaucum C ³ C ³ Goosegrass ² Eleusine indica C ² C ² Johnsongrass, seedling Sorghum halepense C C Junglerice Echinochloa colonum C C Millet, wild-proso Panicum miliaceum L. C	Foxtail, bristly	Setaria verticillata		
Foxtail, robust purple Setaria viridis C Foxtail, yellow ³ Pennisetum glaucum C Goosegrass ² Johnsongrass, seedling Sorghum halepense C Junglerice Echinochloa colonum C Millet, wild-proso C C C C C C C C C C C C C	Foxtail, giant	Setaria faberi	С	
Foxtail, yellow ³ Pennisetum glaucum C ³ Goosegrass ² Johnsongrass, seedling Sorghum halepense C Junglerice Echinochloa colonum C Millet, wild-proso Panicum miliaceum L. C C C C C C C C C C C C C	Foxtail, green	Setaria viridis	С	
Goosegrass 2 Eleusine indica C 2 C 2 Johnsongrass, seedling Sorghum halepense C C Junglerice Echinochloa colonum C C Millet, wild-proso Panicum miliaceum L. C C	Foxtail, robust purple	Setaria viridis		С
Johnsongrass, seedling Sorghum halepense C C Junglerice Echinochloa colonum C C Millet, wild-proso Panicum miliaceum L. C C	Foxtail, yellow ³	Pennisetum glaucum		C ³
JunglericeEchinochloa colonumCCMillet, wild-prosoPanicum miliaceum L.CC	Goosegrass ²	Eleusine indica	C ²	C ²
Millet, wild-proso Panicum miliaceum L. C C	Johnsongrass, seedling	Sorghum halepense		
	Junglerice	Echinochloa colonum		
Millet masse velveteer Millium vernole	Millet, wild-proso	Panicum miliaceum L.		
ivillet, proso volunteer <i>ivillium vernale</i> C	Millet, proso volunteer	Milium vernale	С	С
Oat, wild ³ Avena fatua C ³ C ³	Oat, wild ³		C 3	C ³
Panicum, fall Panicum dichotomiflorum C C	Panicum, fall	Panicum dichotomiflorum		
Panicum, Texas Panicum texanum C C	Panicum, Texas	Panicum texanum		
Rice, red Oryza sativa L. C C	Rice, red	Oryza sativa L.	С	С
Sandbur, field ³ Cenchrus pauciflorus S ³ C ³	Sandbur, field ³			C ³
Shattercane Sorghum vulgare PERS. C C	Shattercane	Sorghum vulgare PERS.	С	С
Signalgrass, broadleaf Brachiaria platyphylla C C	Signalgrass, broadleaf	Brachiaria platyphylla		
Sprangletop Leptochloa spec. C C		Leptochloa spec.		
Sorghum, volunteer Sorghum spp. C C				
Stinkgrass Eragrostis cilianensis C C	Stinkgrass	Eragrostis cilianensis	С	С
Wheat, volunteer ^{2, 3} <i>Triticum spec.</i> C ^{2, 3} C ^{2, 3}	Wheat, volunteer 2, 3	Triticum spec.	C ^{2, 3}	C ^{2, 3}
Witchgrass Panicum virgatum L. C C		Panicum virgatum L.	С	С

¹ Volunteer LibertyLink crops from the previous year will not be controlled. A timely cultivation 7 to 10 days after an application and/or retreatment 10-21 days after the first application is needed for controlling dense clumps of volunteer corn.

² May require sequential applications for control.

³ For best control of yellow foxtail, field sandbur, crabgrass, and wild oats, treat prior to tiller initiation.

Table 3. Biennial and Perennial Weeds Controlled (including Glyphosate-, Triazine-, PPO-, ALS-, HPPD-, and Auxin-Resistant Biotypes) For control of the biennial and perennial weeds listed below, tank mix partners or sequential applications of

Leopard are specified by crop (see crop sections)

		29.0 – 43.0 FI Oz/A
		C=Control
Common Name	Scientific Name	S = Suppression
Alfalfa	Medicago sativa L.	C
Bermudagrass	Cynodon dactylon	С
Bindweed, field	Convolvulus arvensis L.	С
Bindweed, hedge	Calystegia sepium	С
Bluegrass, Kentucky	Poa pratensis L.	С
Blueweed, Texas	Helianthus ciliaris DC.	С
Bromegrass, smooth	Bromus inermis	С
Burdock	Arctium spp.	С
Bursage, woollyleaf	Ambrosia grayi	С
Chickweed, Mouse-ear	Cerastium vulgatum L.	С
Clover, red	Trifolium pretense L.	С
Dandelion	Taraxacum officinale	С
Dock, smooth	Rumex spec.	С
Dogbane, hemp	Apocynum cannabinum	S
Goldenrod, gray	Solidago nemoralis	S
Johnsongrass, rhizome	Sorghum halepense	С
Milkweed, common	Asclepias syriaca	S
Milkweed, honeyvine	Ampelamus albidus	S
Muhly, wirestem	Muhlenbergia frondosa	S
Nightshade, silverleaf	Solanum elaeagnifolium	С
Nutsedge, purple	Cyperus rotundus	S
Nutsedge, yellow	Cyperus ferax	S
Orchardgrass	Dactylis glomerata L.	С
Poinsettia, wild	Euphorbia heterophylla L.	С
Pokeweed	Phytolaccaceae	С
Quackgrass	Agropyron repens	S
Sowthistle, perennial	Sonchus arvensis L.	С
Thistle, bull	Cirsium vulgare	C
Thistle, Canada	Cirsium arvense	С
Timothy	Phleum pretense L.	S
Wormwood, biennial	Artemisia biennis	S

APPLICATION AND MIXING PROCEDURES

Uniform, thorough spray coverage is important to achieve consistent weed control.

Ground Application:

- Refer to the Rate Tables for proper application rates.
- Apply early, when weeds are small.
- To avoid drift and insure consistent weed control, apply Leopard with the spray boom as low as possible while maintaining a uniform spray pattern.
- Apply Leopard broadcast in a minimum of 15.0 gallons of water per acre. Increase to 20 gallons of water per acre if dense weed canopy exists.
- Apply at ground speed of less than 15 mph to attain adequate coverage.
- Use nozzles and pressure that generate a MEDIUM to COARSE size spray droplet. Weed control with droplet sizes larger than coarse droplet size will not provide adequate coverage and will cause unsatisfactory weed control.
- Apply when wind speeds are between 2 mph and 10 mph. Do not apply when winds are gusty, or when conditions will
 favor movement of spray particles off the desired spray target. See the SPRAY DRIFT MANAGEMENT section of this
 label for additional information on proper application of Leopard.

Aerial Application:

- Refer to the Rate Tables for proper application rates.
- · Apply early, when weeds are small.
- Use nozzles and pressure that generate a MEDIUM to COARSE size spray droplet. Weed control with droplet sizes larger than coarse droplet size will not provide adequate coverage and will cause unsatisfactory weed control.
- Apply Leopard by air in a minimum of 10.0 gallons of water per acre.
- See the SPRAY DRIFT MANAGEMENT section of this label for additional information on proper application of Leopard.

Application and Mixing Restrictions:

- Do not use flood jet nozzles, controlled droplet application equipment, or air-assisted spray equipment.
- **Do not** apply when winds are gusty, or when conditions will favor movement of spray particles off the desired spray target.

Compatibility Testing:

If Leopard is to be mixed with pesticide products not listed on this label, test the compatibility of the intended tank mixture prior to mixing the products in the spray tank. The following procedure assumes a spray volume of 25.0 gallons per acre. For other spray volumes, adjust the amount of the water used accordingly. Check compatibility as follows:

- 1. Place 1.0 pint of water from the source that will be used to prepare the spray solution in a clear 1.0 quart jar.
- 2. For each pound of a dry tank mix partner to be applied per acre, add 1.5 teaspoons to the jar.
- 3. For each 16.0 fluid ounces of a liquid tank mix partner to be applied per acre, add 0.5 teaspoon to the jar.
- 4. For each 16.0 fluid ounces of Leopard to be applied per acre, add 0.5 teaspoon to the jar.
- 5. After adding all the ingredients, place a lid on the jar and tighten. Invert 10 times to mix.
- 6. Let the mixture stand for 15 minutes, and evaluate the solution for uniformity and stability. Look for separation, large flakes, precipitates, gels, heavy oily film on the jar, or other signs of incompatibility. If the tank mix partners are not compatible, do not use the mixture in a spray tank.
- After compatibility testing is complete, dispose of any pesticide wastes in accordance with the STORAGE AND DISPOSAL section of this label.

MIXING INSTRUCTIONS

Tank Mix Instructions: Leopard may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Leopard cannot be mixed with any product containing a label prohibition against such mixing. Refer to the specific crop section for rates and other 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.

Leopard must be applied with properly calibrated and clean equipment. Leopard is formulated to mix readily in water.

Prior to adding Leopard to the spray tank, ensure that the spray tank is thoroughly clean, particularly if an herbicide with the potential to injure crops was previously used (see **Cleaning Instructions**). 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.

Mix Leopard with water to make a finished spray solution as follows:

- 1. Properly calibrated and clean equipment
- 2. Fill the spray tank half full with water.
- 3. Start agitation.

- 4. If mixing with a flowable/wettable powder tank mix partner, prepare a slurry of the proper amount of the product in a small amount of water. Add the slurry to the spray tank.
- 5. Add the appropriate amount of ammonium sulfate (AMS) to the spray tank.
- 6. If mixing with a liquid tank mix partner, add the liquid mix partner next.
- 7. Complete filling the spray tank with water before adding Leopard, as foaming may occur.
- 8. Add the proper amount of Leopard and continue agitation.
- 9. If foaming occurs, use a silicone-based antifoam agent.

Ensure that all spray system lines including pipes, booms, etc. have the correct concentration of spray solution by flushing out the spray system lines before starting the crop application.

If tank mix partners specified on this label are added, maintain good agitation at all times until 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. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers must be 50 mesh or larger.

Cleaning Instructions:

Before using Leopard, thoroughly clean bulk storage tank, refillable tank, nurse tanks, spray tank, lines, and filter, particularly if a herbicide with the potential to injure crops was previously used. Thoroughly rinse equipment using a commercial tank cleaner and as instructed on the prior herbicide label.

After using Leopard, triple rinse the spray equipment and clean with a commercial tank cleaner before using the equipment for crops not containing LibertyLink trait. Make sure any rinsate or foam is thoroughly removed from spray tank and boom. Rinsate may be disposed following the pesticide disposal directions on this label.

SPRAY DRIFT MANAGEMENT

Spray drift may result in injury to non-target crops or vegetation. To avoid spray drift, do not apply when wind speed is greater than 10 MPH or during periods of temperature inversions. Do not apply when weather conditions, wind speed, or wind direction may cause spray drift to non-target areas. AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
- For all non-aerial applications, wind speed must be measured adjacent to the application site, on the upwind side, immediately prior to application.

MANDATORY SPRAY DRIFT MITIGATION

- When applying to crops via aerial application equipment, the spray boom must be mounted on the aircraft so as to minimize drift caused by wing tip or rotor blade vortices. The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.
- When applying to crops via aerial application equipment, applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.
- For aerial applications, 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.
- For ground applications and aerial applications, select nozzle and pressure that deliver medium to coarse spray droplets as indicated in nozzle manufacturer's catalogues and in accordance with ASABE Standard 572.1.
- Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 24 inches above target pest or crop canopy. Set boom to lowest effective height over the target pest or crop canopy based on equipment manufacturer's directions. Automated boom height controllers are recommended with large booms to better maintain optimum nozzle to canopy height. Excessive boom height will increase the potential for spray drift.
- For non-crop vegetation management ground applications, apply with the nozzle height no more than 4 feet above the ground or target vegetation, unless necessitated by the application equipment. Examples would include roadside, railroad, utility rights of way, forestry and other industrial vegetation management applications where safety or natural barriers obstruct application.

SPRAY DRIFT ADVISORIES

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.

POLLINATOR ADVISORY STATEMENT

This product contains an herbicide. Follow all label directions and precautions to minimize potential off-target exposure in order to prevent effects to non-target plants adjacent to the treated site which may serve as habitat or forage for pollinators.

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 – Ground Boom

- 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 airstream will produce larger droplets than other orientations. AVOIDING SPRAY DRIFT IS THE RESPONSIBILITY OF THE APPLICATOR.
- 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 Longer booms increase drift potential. Therefore a shorter boom length is recommended.
- · Application Height Application more than 10 ft. above the canopy increases the potential for spray drift.

BOOM HEIGHT

Setting the boom at the lowest referenced height (if specified) which 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 APPLICATIONS DURING GUSTY OR WINDLESS CONDITIONS.

Note: Local terrain can influence wind patterns. Every applicator needs to be familiar 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.

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.

APPLICATION DIRECTIONS FOR BURNDOWN USE

Leopard may be applied as a **burndown treatment prior to planting or prior to emergence** of any variety of canola, corn, sweet corn, cotton, soybean or sugar beet.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section. Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures.

For optimum results on lambsquarters, Palmer amaranth and velvetleaf make applications between dawn and 2 hours before sunset.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

Application Rates:

Apply 29.0 – 43.0 fluid ounces per acre of Leopard depending on crop, weed species and intention of post application use. Please see application charts below.

- In cotton, if environmental conditions prevent timely applications, a single application may be made of up to 43.0 fluid ounces per acre of Leopard. If more than 29.0 fluid ounces per acre used in any single application, the annual total may not exceed 72.0 fluid ounces per acre (1.32 lbs ai/A), including all application timings.
- In canola, corn (sweet and field) and soybean, if environmental conditions prevent timely applications, a single application may be made of up to 43.0 fluid ounces per acre (0.79 lbs ai/A) of Leopard. The year total may not exceed 43.0 fluid ounces per acre (0.79 lbs ai/A), including all application timings.
- [In **sugar beets**, if environmental conditions prevent timely applications, a single application may be made of up to 36.0 fluid ounces per acre (0.66 lbs ai/A) of Leopard. No additional applications of Leopard may be made post emergence to the crop during the year.]

Adjuvant:

Ammonium sulfate (AMS) may be used at 1.5 to 3 pounds per acre. Adjuvant rates are dependent on tank mix partners, temperatures, environmental conditions and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (low relative humidity) or hard water.

Surfactants / Crop Oils:

The use of surfactants may be included. Please refer to the surfactant label for more detailed information.

Table 4. APPLICATION DIRECTIONS FOR CROPS

Crop	Burndown	In Season Applications	Annual Max
Canola, Soybean,	29 - 43 fl oz/A	None	43 fl oz/A
Sweet Corn, Field Corn	(0.53 – 0.79 lbs ai/A)		(0.79 lbs ai/A)
Sugar beets	29 - 36 fl oz/A (0.53 – 0.66 lbs ai/A)	None	36 fl oz/A (0.66 lbs ai/A)
Cotton Use Pattern 1	29 fl oz/A	2 applications at 29 fl oz/A*	87 fl oz/A
	(0.53 lbs ai/A)	(0.53 lbs ai/A)	(1.59 lbs ai/A)
Cotton Use Pattern 2	30-43 fl oz/A	1 application at 29 fl oz/A*	72 fl oz/A
	(0.55 – 0.79 lbs ai/A)	(0.53 lbs ai/A)	(1.32 lbs ai/A)

^{*} Cotton containing the LibertyLink trait OR with hooded sprayer for all varieties (see COTTON use directions).

Table 5. APPLICATION DIRECTIONS FOR CROPS CONTAINING LIBERTYLINK TRAIT

Сгор	Burndown	In Season Applications of Crops Containing the LibertyLink® (LL) Trait	Annual Max
LL Soybean, LL Field Corn	29 - 43 fl oz/A	1 to 2 applications at 29 - 43 fl oz/A	87 fl oz/A
	(0.53 – 0.79 lbs ai/A)	(0.53 – 0.79 lbs ai/A)	(1.59 lbs ai/A)
LL Sweet Corn	22 fl oz/A	1 to 2 applications at 22 fl oz/A	44 fl oz/A
	(0.40 lbs ai/A)	(0.4 lbs ai/A)	(0.8 lbs ai/A)
LL Canola	29 - 43 fl oz/A	1 to 2 applications at 29 fl oz/A	87 fl oz/A
	(0.53 – 0.79 lbs ai/A)	(0.53 lbs ai/A)	(1.59 lbs ai/A)
LL Cotton Use Pattern 1	29 fl oz/A	1 to 2 applications at 29 fl oz/A*	87 fl oz/A
	(0.53 lbs ai/A)	(0.53 lbs ai/A)	(1.59 lbs ai/A)
LL Cotton Use Pattern 2	30 - 43 fl oz/A	1 application at 29 fl oz/A*	72 fl oz/A
	(0.55 – 0.79 lbs ai/A)	(0.53 lbs ai/A)	(1.32 lbs ai/A)
LL Sugar beets	29 - 36 fl oz/A	1 application at 29 fl oz/A	60 fl oz/A
	(0.53 – 0.66 lbs ai/A)	(0.53 lbs ai/A)	(1.1 lbs ai/A)

^{*} Cotton containing the LibertyLink trait OR with hooded sprayer for all varieties (see COTTON use directions).

[APPLICATION DIRECTIONS FOR USE ON SUGAR BEETS CONTAINING THE LIBERTYLINK TRAIT [Not for use in California.]

Apply Leopard only to sugar beets containing LibertyLink trait. Leopard is a contact herbicide and requires uniform, thorough spray coverage to achieve optimum weed control.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness.

Applications of Leopard on sugar beets containing the LibertyLink trait may be made from the cotyledon stage up to the 10-leaf stage of the sugar beet. Leopard is a foliar-active material with little or no soil-residual activity.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

For best result:

- On lambsquarters, Palmer amaranth and velvetleaf control, make applications of Leopard between dawn and 2 hours before sunset.
- Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard.

Application Rates:

Apply 29 - 36 fluid ounces per (0.53 – 0.66 lbs ai/A) depending on weed species, size and density per weed chart.

If a second application is needed, make the second application in a minimum of 10 days after the first application.

The maximum annual rate of Leopard on sugar beets is 60.0 fluid ounces per acre (1.1 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Adjuvants:

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water.

The use of an anti-foam agent is recommended.

Surfactants / Oils:

The use of additional surfactants or crop oils in tank mixes with Leopard may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality:

Use medium to coarse nozzles.

Leopard is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

Restrictions to the Directions For Use on Sugar Beets Containing the LibertyLink Trait:

- DO NOT apply more than 60.0 fluid ounces per acre (1.1 lbs ai/A) of Leopard on the sugar beet crop per year.
- **DO NOT** apply Leopard within 60 days of harvesting sugar beets.
- **DO NOT** plant rotation crops in a field treated with Leopard within 120 days after the last application of Leopard with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale which may be planted 70 days after the last application of Leopard. Corn, soybeans, canola, and sugar beets tolerant to the active ingredient of Leopard may be planted at any time.
- **DO NOT** graze the treated crop or cut for hay.
- **DO NOT** apply Leopard if sugar beets show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply Leopard through any type of irrigation system.

APPLICATION DIRECTIONS FOR USE ON CANOLA CONTAINING THE LIBERTYLINK TRAIT

Apply Leopard only to canola containing the LibertyLink trait. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness.

Applications of Leopard on canola contaig the LibertyLink trait may be made from the cotyledon stage up to the early bolt stage of the canola. Slight discoloration of the canola may be visible after application. This effect is temporary and will not influence crop growth, maturity, or yield.

Leopard is a foliar-active material with little or no soil-residual activity.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

For best result:

- On lambsquarters, Palmer amaranth and velvetleaf control, make applications of Leopard between dawn and 2 hours before sunset
- Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard.

Application Rates:

Apply Leopard at 22.0 to 29.0 fluid ounces per acre (0.4 to 0.53 lbs ai/A) per application, depending on weed species, size and density per weed chart.

If a second application is needed, make the second application in a minimum of 7 days after the first application.

The maximum annual rate of Leopard on canola is 87.0 fluid ounces per acre (1.59 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Application Rates with Tank Mix Partners:

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.

Apply Leopard at 22.0 to 29.0 fluid ounces per acre (0.4 to 0.53 lbs ai/A) per application, depending on weed species, size and density per weed chart.

Tank mix partners recommended to enhance grass control, such as [quizalofop p-ethyl][,] [sethoydim][,] [and] [clethodim]. If a second application is needed, make the second application in a minimum of 7 days after the first application.

Tank mixes may aid in the performance of Leopard. Please refer to weed chart tables for a listing of weed species controlled at this rate.

No additional surfactant is needed with any tank mix partner.

The tank mix partner must be used in accordance with the label limitations, restrictions and precautions.

Do not exceed any labeled dosage rates.

Do not mix Leopard mix with any product containing a label prohibition against such mixing.

Adjuvants:

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water.

The use of an anti-foam agent is recommended.

Surfactants / Oils:

The use of additional surfactants or crop oils in tank mixes with Leopard may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality:

Use medium to coarse nozzles.

Leopard is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

Restrictions to the Directions For Use on Canola Containing the LibertyLink Trait:

- **DO NOT** use on canola containing the LibertyLink trait in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia.
- DO NOT apply more than 2 applications of Leopard per year. Sequential applications must be at least 10 days apart.
- DO NOT apply Leopard within 65 days of harvesting canola.
- DO NOT apply more than 87.0 fluid ounces per acre (1.59 lbs ai/A) of Leopard per year.
- DO NOT graze the treated crop or cut for hay.
- DO NOT apply Leopard if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- DO NOT apply Leopard through any type of irrigation system.
- Refer to the **ROTATIONAL CROP RESTRICTIONS** section under the **PRODUCT INFORMATION** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION RATE AND TIMING FOR CANOLA CONTAINING LIBERTYLINK TRAIT SEED PROPAGATION

[Not for use in California]

Up to 3 applications of Leopard at up to 29.0 fluid ounces per acre (0.53 lbs ai/A) per application may be made to canola containing the LibertyLink trait for seed propagation. Applications may be made from the cotyledon stage up to the early bolting stage (e.g., BBCH 18-30, between just prior to stem elongation/bolting, 8 or more leaves and beginning of stem elongation, no internodes).

Restrictions to the Directions for Canola Containing the LibertyLink Trait for Seed Propagation:

- **DO NOT** apply more than 3 applications of Leopard at up to 29.0 fluid ounces per acre (0.53 lbs ai/A) per application per vear.
- DO NOT apply more than 87.0 fluid ounces per acre (1.59 lbs ai/A) of Leopard per year.
- DO NOT apply Leopard beyond the early bolting stage or within 65 days of harvesting canola seed.
- DO NOT use treated canola seed for food, feed or oil purposes.
- DO NOT apply Leopard if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply this product through any type of irrigation system.

APPLICATION DIRECTIONS FOR USE ON SWEET CORN CONTAINING THE LIBERTYLINK TRAIT [Not for use in California.]

Apply Leopard only to sweet corn containing the LibertyLink trait. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness.

Applications for Leopard on sweet corn may be made from emergence until the V-6 stage of growth.

Leopard is a foliar-active material with little or no soil-residual activity.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result:

- On lambsquarters, Palmer amaranth and velvetleaf control, make applications of Leopard between dawn and 2 hours before sunset.
- Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard.

Application Rate:

Apply Leopard at 22.0 fluid ounces per acre (0.4 lbs ai/A), depending on weed species, size and density per weed chart.

If a second application is needed, make the second application in a minimum of 7 days after the first application.

The maximum annual rate of Leopard on sweet corn is 44.0 fluid ounces per acre (0.8 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Application Rates with Tank Mix Partners:

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.

Apply Leopard at 22.0 fluid ounces per acre (0.4 lbs ai/A) per application, depending on weed species, size and density per weed chart.

Recommended tank mix partners, such as [atrazine][,] [tembotrione][,] [thiencarbazone-methyl][,][and] [dicamba, DGA salt]. If a second application is needed, make the second application in a minimum of 7 days after the first application.

Tank mixes may aid in the performance of Leopard. Please refer to weed chart tables for a listing of weed species controlled at this rate.

No additional surfactant is needed with any tank mix partner.

The tank mix partner must be used in accordance with the label limitations, restrictions and precautions.

Do not exceed any labeled dosage rates.

Do not mix Leopard mix with any product containing a label prohibition against such mixing.

Adjuvants:

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water.

The use of an anti-foam agent is recommended.

Surfactants / Oils:

The use of additional surfactants or crop oils in tank mixes with Leopard may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality:

Use medium to coarse nozzles.

Leopard is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control

See SPRAY DRIFT MANAGEMENT section for more detailed information.

Restrictions to the Directions For Use on Sweet Corn Containing the LibertyLink Trait:

- DO NOT apply Leopard within 50 days of harvesting sweet corn ears and within 55 days of harvesting stover.
- DO NOT apply more than 44.0 fluid ounces per acre (0.8 lbs ai/A) of Leopard on sweet corn per year.
- DO NOT apply more than 2 applications of Leopard to the sweet corn crop. Sequential applications must be at least 7 days apart.
- If Leopard was used in a burndown application, no post emergence applications may be applied to the crop.
- DO NOT use nitrogen solutions as spray carriers.
- **DO NOT** apply Leopard if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.)
- **DO NOT** apply Leopard through any type of irrigation system.

Refer to the **ROTATIONAL CROP RESTRICTIONS** section under the **PRODUCT INFORMATION** heading of this label for the appropriate rotational crop plant back intervals.

See APPLICATION DIRECTIONS FOR USE ON FIELD CORN AND SILAGE CORN for APPLICATION METHODS, MIXING INSTRUCTIONS, and WEED CONTROL TABLES.

APPLICATION DIRECTIONS FOR USE ON FIELD CORN AND SILAGE CORN CONTAINING THE LIBERTYLINK TRAIT

Apply Leopard only to corn containing the LibertyLink trait. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under

stress due to drought, cool temperatures, or extended periods of cloudiness.

Applications for Leopard on corn may be made from emergence until the V-6 stage of growth.

Leopard is a foliar-active material with little or no soil-residual activity.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

For best result:

- On lambsquarters, Palmer amaranth and velvetleaf control, make applications of Leopard between dawn and 2 hours before sunset.
- Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard.

Application Rate:

Apply Leopard at 29 - 43 fluid ounces per acre (0.53 - 0.79 lbs ai/A), depending on weed species, size and density per weed chart.

If a second application is needed, make the second application at up to 29 fluid ounces per acre (0.53 lbs ai/A) with a minimum of 7 days after the first application.

The maximum annual rate of Leopard on field corn and silage corn is 87.0 fluid ounces per acre (1.59 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Application Rates with Tank Mix Partners:

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.

Apply Leopard at 29.0 - 43.0 fluid ounces per acre (0.53 - 0.79 lbs ai/A), depending on weed species, size and density per weed chart.

Recommended tank mix partners, such as [atrazine][,] [tembotrione][,] [thiencarbazone-methyl][,][and] [dicamba, DGA salt]. If a second application is needed, make the second application in a minimum of 7 days after the first application.

Tank mixes may aid in the performance of Leopard. Please refer to weed chart tables for a listing of weed species controlled at this rate.

No additional surfactant is needed with any tank mix partner.

The tank mix partner must be used in accordance with the label limitations, restrictions and precautions.

Do not exceed any labeled dosage rates.

Do not mix Leopard mix with any product containing a label prohibition against such mixing.

Adjuvants:

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water.

The use of an anti-foam agent is recommended.

Surfactants / Oils:

The use of additional surfactants or crop oils in tank mixes with Leopard may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality:

Use medium to coarse nozzles.

Leopard is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

Restrictions to the Directions For Use on Field Corn and Corn Silage Containing LibertyLink Trait:

- DO NOT apply Leopard within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder
- DO NOT apply more than 2 applications of Leopard to the crop. Sequential applications must be at least 10 days apart.
- DO NOT apply more than 87.0 fluid ounces per acre (1.59 lbs ai/A) of Leopard on corn per year.
- DO NOT use nitrogen solutions as spray carriers.
- **DO NOT** apply Leopard if corn shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.)
- DO NOT apply Leopard through any type of irrigation system.

Refer to the **ROTATIONAL CROP RESTRICTIONS** section under the **PRODUCT INFORMATION** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION DIRECTIONS FOR USE ON COTTON CONTAINING THE LIBERTYLINK TRAIT

Uniform, thorough spray coverage is necessary to achieve consistent weed control. Leopard may be applied as a broadcast, over-the-top, post-emergence spray or as a directed spray only to cotton containing the LibertyLink trait.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness.

Leopard is a foliar-active material with little or no soil-residual activity.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result:

- On lambsquarters, Palmer amaranth and velvetleaf control, make applications of Leopard between dawn and 2 hours before sunset.
- Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard.

Apply Leopard to cotton from emergence up to the early bloom stage at 29.0 fluid ounces per acre (0.53 lbs ai/A). Should environmental conditions prevent a timely herbicide application, a single application of up to 43.0 fluid ounces per acre (0.79 lbs ai/A) of Leopard may be made to cotton. If more than 29.0 fluid ounces per acre (0.53 lbs ai/A) are used in any single application, the annual total may not exceed 72.0 fluid ounces per acre (1.32 lbs ai/A), including all application timings. See **Restrictions to the Directions for use on Cotton Containing the LibertyLink Trait** below for additional information.

Application Rates:

Option 1 3 post applications

Apply 29 fluid ounces per acre (0.53 lbs ai/A) per application depending on weed species, size and density per weed chart. If required a second application of 29 fluid ounces per acre (0.53 lbs ai/A) can be applied, followed by a third application of 29 fluid ounces per acre (0.53 lbs ai/A).

The sequential applications must be made minimum 10 days and should be made up to 14 days after each other.

The maximum annual rate of Leopard on cotton is 87.0 fluid ounces per acre (1.59 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Option 2 2 post applications

Apply 32 - 43 fluid ounces per acre (0.59 - 0.79 lbs ai/A) per application depending on weed species, size and density per weed chart.

If required a second application of 29 fluid ounces per acre (0.53 lbs ai/A) can be applied.

The sequential applications must be made minimum 10 days and should be made up to 14 days after each other.

The maximum annual rate of Leopard on cotton is 72 fluid ounces per acre (1.32 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Use Pattern	1 st Application	2nd Application Minimum 10 Days Up to 14 Days After 1 st Application	3rd Application Minimum 10 Days Up to 14 Days After 2 nd Application	Annual Maximum
Option 1	29 fl oz/A (0.53 lbs ai/A)	29 fl oz/A (0.53 lbs ai/A)	29 fl oz/A (0.53 lbs ai/A)	87 fl oz/A (1.59 lbs ai/A)
Option 2	32-43 fl oz/A (0.59 – 0.79 lbs ai/A)	29 fl oz/A (0.53 lbs ai/A)	None	72 fl oz/A (1.32 lbs ai/A)

Tank Mix on Cotton Containing the LibertyLink Trait:

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.

Certain herbicide tank mixes may aid in the performance of Leopard. Leopard may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates

may be exceeded. Leopard cannot be mixed with any product containing a label prohibition against such mixing.

Adjuvants:

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water.

The use of an anti-foam agent is recommended.

Surfactants / Oils:

The use of additional surfactants or crop oils in tank mixes with Leopard may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality:

Use medium to coarse nozzles.

Leopard is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See SPRAY DRIFT MANAGEMENT section for more detailed information.

Restrictions to the Directions For Use on Cotton Containing the LibertyLink Trait:

- **DO NOT** apply Leopard to cotton **containing the** LibertyLink trait in Florida, South of Tampa (Florida Route 60), or in Hawaii, except for test plots or breeding nurseries.
- **DO NOT** apply Leopard within 70 days prior to cotton harvest.
- Up to 3 applications of Leopard may be made to cotton per year at a maximum application rate of 29.0 fluid ounces per acre (0.53 lb ai/A). **DO NOT** apply more than 87.0 fluid ounces (including all application timings) to cotton (1.59 lbs ai/A) per year under this application scenario. Sequential applications must be at least 10 days apart.
- If environmental conditions prevent timely applications resulting in large weeds or heavy infestations, a single application of Leopard at up to 43.0 fluid ounces per acre (0.79 lb ai/A) may be made to cotton. **DO NOT** apply more than 43.0 fluid ounces (0.79 lb ai/A) of Leopard in a single application under this use scenario. If a single application greater than 29.0 fluid ounces (0.53 lb ai/A) is made, a subsequent application not to exceed 29.0 fluid ounces (0.53 lb ai/A) may be made to cotton. The annual total use rate under this scenario may not exceed 72.0 fluid ounces (1.32 lb ai/A) of Leopard. Sequential applications must be at least 10 days apart.
- DO NOT apply Leopard through any type of irrigation system.
- Refer to the **ROTATIONAL CROP RESTRICTIONS** section under the **PRODUCT INFORMATION** heading of this label for the appropriate rotational crop plant back intervals.

APPLICATION DIRECTIONS FOR USE ON COTTON

Application of Leopard to cotton varieties not containing the LibertyLink trait requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness.

Applications for Leopard on cotton may be made from emergence up to early bloom.

Leopard is a foliar-active material with little or no soil-residual activity.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

For best result:

- On lambsquarters, Palmer amaranth and velvetleaf control, make applications of Leopard between dawn and 2 hours before sunset.
- Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard.

Application Rates:

Option 1 3 post applications

Apply 29 fluid ounces per acre (0.53 lbs ai/A) per application depending on weed species, size and density per weed chart. If required a second application of 29 fluid ounces per acre (0.53 lbs ai/A) can be applied, followed by a third application of 29 fluid ounces per acre (0.53 lbs ai/A).

The sequential applications must be made minimum 10 days and should be made up to 14 days after each other.

The maximum annual rate of Leopard on cotton is 87.0 fluid ounces per acre (1.59 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Option 2 2 post applications

Apply 32 - 43 fluid ounces per acre (0.59 - 0.79 lbs ai/A) per application depending on weed species, size and density per weed chart.

If required a second application of 29 fluid ounces per acre (0.53 lbs ai/A) can be applied.

The sequential applications must be made minimum 10 days and should be made up to 14 days after each other.

The maximum annual rate of Leopard on cotton is 72 fluid ounces per acre (1.32 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Use Pattern	1 st Application	2nd Application Minimum 10 Days Up to 14 Days After 1 st Application	3rd Application Minimum 10 Days Up to 14 Days After 2 nd Application	Annual Maximum
Option 1	29 fl oz/A (0.53 lbs ai/A)	29 fl oz/A (0.53 lbs ai/A)	29 fl oz/A (0.53 lbs ai/A)	87 fl oz/A (1.59 lbs ai/A)
Option 2	32-43 fl oz/A (0.59 – 0.79 lbs ai/A)	29 fl oz/A (0.53 lbs ai/A)	None	72 fl oz/A (1.32 lbs ai/A)

Adjuvants:

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water.

The use of an anti-foam agent is recommended.

Surfactants / Oils:

The use of additional surfactants or crop oils in tank mixes with Leopard may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality:

Use medium to coarse nozzles.

Leopard is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See SPRAY DRIFT MANAGEMENT section for more detailed information.

Application Methods to Cotton:

Application of Leopard to cotton varieties not containing the LibertyLink trait requires the use of hooded spray equipment designed to minimize exposure of the spray to the cotton stand. A hooded sprayer directs the spray onto weeds, while shielding the cotton stand from contact. Use nozzles that provide uniform coverage within the treated area. Keep hoods on these sprayers adjusted to protect desirable vegetation. Extreme care must be exercised to avoid exposure of the desirable vegetation to the spray.

With a hooded sprayer, the spray pattern is completely enclosed on the top and all 4 sides by a hood, thereby shielding the crop from the spray solution. This equipment must be set up and operated in a manner that avoids bouncing or raising the hoods off the ground in any way. The spray hoods must be operated on the ground or skimming across the ground. Tractor speed must be adjusted to avoid bouncing of the spray hoods. Avoid operation on rough or sloping ground where the spray hoods might be raised off the ground. If the hoods are raised, spray particles may escape and come into contact with the cotton, causing damage or destruction of the crop.

Herbicide rates and spray volume instructions are presented as broadcast equivalents and must be reduced in proportion to the area actually treated. Use the following formulas to calculate the correct rate and volume per planted (field) acre:

Band width in inches
Row width in inches

X Broadcast RATE per acre = Amount of banded product needed per acre

Band width in inches
Row width in inches
X Broadcast spray VOLUME per acre = Banded spray volume needed per acre

Post-Harvest - Fall Burndown:

Leopard may be applied as a post-harvest burndown treatment to fields (after cotton harvest). Up to 43.0 fluid ounces per acre (0.79 lb ai/A) of Leopard may be applied in a single application to control larger weeds growing in the crop at the time of harvest. If more than 29.0 fluid ounces per acre (0.53 lb ai/A) is used in a single application, the annual total may not exceed 72.0 fluid ounces per acre (1.32 lb ai/A), including all application timings. Refer to the **ROTATIONAL CROP RESTRICTIONS** section of this label for appropriate rotational crop information.

Tank Mix on Cotton:

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.

Certain herbicide tank mixes may aid in the performance of Leopard. Leopard may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the cotton to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Leopard cannot be mixed with any product containing a label prohibition against such mixing.

APPLICATION DIRECTIONS FOR USE ON SOYBEANS CONTAINING THE LIBERTYLINK TRAIT

Apply Leopard only to soybeans containing the LibertyLink trait. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

Application Timing:

Apply to small and actively growing weeds, targeting less than 3 inch weeds in height. For additional information on weed heights refer to the **WEED CONTROL FOR ROW CROPS** section.

Weed control may be reduced if application is made when heavy dew, fog, and mist/rain are present; or when weeds are under stress due to drought, cool temperatures, or extended periods of cloudiness.

Applications for Leopard on soybeans may be made from emergence up to bloom or R1 growth stage.

Leopard is a foliar-active material with little or no soil-residual activity.

Leopard is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment. For best result:

- On lambsquarters, Palmer amaranth and velvetleaf control, make applications of Leopard between dawn and 2 hours before sunset.
- Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard.

Application Rate:

Apply Leopard at 29 - 43 fluid ounces per acre (0.53 - 0.79 lbs ai/A), depending on weed species, size and density per weed chart

If a second application is needed, make the second application of 29 - 43 fluid ounces per acre (0.53 - 0.79 lbs ai/A), can be applied up to a yearly maximum of 87.0 fluid ounces per acre (1.59 lbs ai/A).

The maximum annual rate of Leopard on soybeans is 87.0 fluid ounces per acre (1.59 lbs ai/A).

Use a minimum spray volume of 15 gallons per acre, unless there is a difficult to control situation (such as dense canopy, large weeds or unfavorable growing conditions are present). In difficult to control situations use a minimum spray volume of 20 gallons per acre.

Use Pattern Rate Ranges				
1st Application	2nd Application Minimum of 5 Days After 1 st Application	Annual Maximum		
29.0 to 43.0 fl oz/A (0.53 – 0.79 lbs ai/A)	29.0 to 43.0 fl oz/A (0.53 – 0.79 lbs ai/A)	87.0 fl oz/A (1.59 lbs ai/A)		

Adjuvants:

Ammonium sulfate (AMS) may be used at 1.5 to 3.0 pounds per acre. Adjuvant rates are dependent on a variety of factors including tank mix partners, environmental conditions (such as temperature) and potential for leaf burn.

AMS has shown to improve weed control of difficult-to-control weeds, like lambsquarters and velvetleaf, under difficult environmental conditions (such as low relative humidity) or hard water.

The use of an anti-foam agent is recommended.

Surfactants / Oils:

The use of additional surfactants or crop oils in tank mixes with Leopard may increase the risk of crop response. Please refer to the surfactant label for more detailed information.

Nozzle Spray Quality:

Use medium to coarse nozzles.

Leopard is a contact herbicide and requires proper nozzles with uniform thorough spray coverage to achieve optimum weed control.

See **SPRAY DRIFT MANAGEMENT** section for more detailed information.

Restrictions to the Directions For Use on Soybeans Containing the LibertyLink Trait:

- DO NOT apply Leopard within 70 days of harvesting soybean seed.
- DO NOT apply more than 87.0 fluid ounces per acre (1.59 lbs ai/A) of Leopard on soybeans per growing year.
- DO NOT apply more than 43.0 fluid ounces per acre (0.79 lbs ai/ A) of Leopard in a single application.
- **DO NOT** graze the treated crop or cut for hay.
- DO NOT use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
- **DO NOT** apply Leopard if soybeans show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
- **DO NOT** apply Leopard through any type of irrigation system.
- Refer to the **ROTATIONAL CROP RESTRICTIONS** section under the **PRODUCT INFORMATION** heading of this label for the appropriate rotational crop plant back intervals.
- Sequential applications must be at least 5 days apart.

Soybean Tank Mix Instructions:

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.

Certain herbicide tank mixes may complement Leopard. No additional surfactant is needed with any tank mix partner. Leopard may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the soybean to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Leopard cannot be mixed with any product containing a label prohibition against such mixing.

APPLICATION DIRECTIONS FOR CANOLA, CORN, COTTON, AND SOYBEAN SEED PROPAGATION

Leopard may be applied to select out susceptible "segregates", i.e., canola, corn, cotton, and soybean plants that do not contain the LibertyLink trait during seed propagation.

Canola Containing as LibertyLink Trait:

Leopard may also be used in canola seed propagation as a foliar spray to selectively eliminate canola plants that do not carry a gene that imparts tolerance to glufosinate-ammonium and as such, can be applied to remove susceptible segregates during canola seed propagation. Breeding material not possessing the glufosinate-ammonium tolerance gene will be severely injured or killed if treated with this herbicide. See **APPLICATION DIRECTIONS FOR USE ON CANOLA CONTAINING THE LIBERTYLINK TRAIT** for use rates and application timing.

Corn Containing the LibertyLink Trait:

Inbred lines, plants not containing the LibertyLink trait, will be severely injured or killed if treated with this herbicide. A

hooded sprayer may be used to protect plants from coming into contact with the herbicide application. For the selection of tolerant corn "segregates," Leopard may be applied at 22.0 fluid ounces per acre (0.4 lbs ai/A) plus AMS at 3.0 pounds per acre (17.0 pounds per 100 gallons) when corn is in the V-3 to V-4 stage of growth, i.e., 3 to 4 developed collars. A second treatment of 22.0 fluid ounces per acre plus AMS at 3.0 pounds per acre may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24 inches tall. Sequential applications must be at least 10 days apart. When temperatures exceed 85 °F, the rate of AMS can be reduced to 1.5 pounds per acre (8.5 pounds per 100 gallons) to reduce potential leaf burn.

Cotton Containing the LibertyLink Trait:

Leopard may also be used in cotton seed propagation as a foliar spray to selectively eliminate cotton plants that do not carry the LibertyLink trait and as such, can be applied to remove susceptible segregates during cotton seed propagation. Breeding material not containing the LibertyLink trait will be severely injured or killed if treated with this herbicide. See **APPLICATION DIRECTIONS FOR USE ON COTTON CONTAINING THE LIBERTYLINK TRAIT** for use rates and application timing.

Soybeans Containing the LibertyLink Trait:

For the selection of tolerant soybean "segregates," Leopard may be applied at up to 29.0 to 43.0 fluid ounces per acre (0.53 - 0.79 lbs ai/A) when soybean is in the third trifoliate stage. A second treatment of 29.0 to 43.0 fluid ounces per acre (0.53 - 0.79 lbs ai/A) may be applied up to but not including the bloom growth stage of soybean. Sequential applications must be at least 5 days apart.

APPLICATION DIRECTIONS FOR USE ON LISTED TREE, VINE, AND BERRY CROPS

Apply this to the tree, vine, and berry crops listed below. Uniform, thorough spray coverage is necessary to achieve consistent weed control.

REGISTERED CROPS:

[Option 1 (Note to Reviewer- Either Option 1 or Option 2 will appear on the container label)]

Berries (Crop Subgroup 13-07B):

Crop Subgroup 13-07B Bushberry Subgroup

Aronia berry; blueberry, highbush; blueberry, lowbush; buffalo currant; Chilean guava; currant, black; currant, red; elderberry; European, barberry; gooseberry; cranberry, highbush; honeysuckle, edible; huckleberry; jostaberry; Juneberry; lingonberry; native currant; salal; sea buckthorn; cultivars, varieties, and/or hybrids of these.

Citrus Fruits (Citrus spp., Fortunella spp.) (Crop Group 10):

Crop Subgroup 10–10A. Orange Subgroup

Orange or tangerine/mandarin - Calamondin; citron; citrus hybrids; Mediterranean mandarin; orange, sour; orange, sweet; satsuma darin; tachibana orange; tangerine (mandarin); tangelo; tangor; trifoliate orange; cultivars, varieties, and/or hybrids of these.

Crop Subgroup 10-10B. Lemon/Lime Subgroup

Lemon or lime - Australian desert lime; Australian finger lime; Australian round lime; brown river finger lime; kumquat; lemon; lime; mount white lime; New Guinea wild lime; Russell River lime; sweet lime; Tahiti lime; cultivars, varieties, and/or hybrids of these.

Crop Subgroup 10-10C. Grapefruit Subgroup

Grapefruit - Grapefruit; Japanese summer grapefruit; pummelo; tangelo; uniq fruit; cultivars, varieties, and/or hybrids of these.

Olives: all olive varieties

Pome Fruit (Crop Group 11):

Crop Group 11. Pome Fruits Group

Apple; crabapple; loquat; mayhaw; pear; pear, oriental; quince; azarole; hook; medlar; quince, Chinese; quince, Japanese; tejocote; cultivars, varieties and/or hybrids of these.

Stone Fruit (Crop Group 12):

Crop Group 12. Stone Fruit Group

Apricot; cherry, sweet; cherry, tart; nectarine; peach; plum; plum, chickasaw; plum, damson; plum, Japanese; plumcot; prune; and cultivars varieties and/or hybrids of these

Tree Nuts (Crop Group 14 including Pistachios):

Crop Group 14. Tree Nuts Group

Almond; beech nut; Brazil nut; butternut; cashew; chestnut; chinquapin; filbert (hazelnut); hickory nut; macadamia nut (bush nut); pecan; walnut, black and English

Grapes: all grape varieties (table, wine and raisins)

[Option 2 (Note to Reviewer- Either Option 1 or Option 2 will appear on the container label)]

Bushberries: blueberry, currant, elderberry, gooseberry, and huckleberry

Other Berries: Lingonberry, juneberry, and Salal Citrus: lemon, orange, grapefruit, lime, mandarin, tangerine, tangelo, calamondin, kumquat, pummelo, citron, citrus hybrids, Tangor, and cultivars, varieties and/or hybrids of these

Pome Fruit: Apple, pear, crabapple, loquat, mayhaw, quince, azarole, Medlar, Tejocote, cultivars, varieties and/or hybrids of these

Stone Fruit: Apricot, cherry, peach, nectarine, plum, capulin, jujube, Sloe, and cultivars, varieties and/or hybrids of these

Tree Nuts: almonds, filberts, hickory nuts, macadamia nuts (bush nuts), pecans, pistachios, and walnuts Vineyards: grape varieties (table, wine, and raisins)

Application Rate and Timing:

For best results, apply to emerged, young, actively growing weeds. Warm temperatures, high humidity, and bright sunlight improve the performance of Leopard. Weed control may be reduced when applications are made to weeds under stress due to drought or cool temperatures. Weeds under stress or in dense populations will require application at the highest specified label use rate. Stressed conditions also include prior treatments of other contact or systemic herbicides. Do not retreat these weeds with Leopard until sufficient regrowth has occurred.

Apply Leopard as a directed spray to control undesirable vegetation in tree, vine, and berries listed on this label. Apply as a broadcast, banded, or spot treatment application depending on the situation to control weeds listed under the heading **Weeds Controlled in Tree, Vine and Berry Crops**. Avoid direct spray or drift to desirable vegetation. Regrowth may occur due to the weed stage of growth at application, low use rate, or environmental conditions. Repeat applications of Leopard may be necessary to control plants generating from underground parts or seed.

Avoid contact of Leopard solution, spray, drift or mist with green bark, stems, or foliage, as injury may occur to trees, vines, and berries. Only trunks with callused, mature brown bark should be sprayed unless protected from spray contact by nonporous wraps, grow tubes, or waxed containers. Contact of Leopard with parts of trees, vines, or berries other than mature brown bark can result in serious damage.

Application Methods for Broadcast Applications:

Apply Leopard at the rates listed below for broadcast applications based on weed size and stage of growth.

Weed Size and Stage	Rate of this product
Weeds < 3 in height	48 fl oz/A (0.88 lbs ai/A)
Weeds < 6 in height pre tiller grasses	56 fl oz/A (1.02 lbs ai/A)
Weeds > 6 in height and/or grasses that have tillered	56-82 fl oz/A (1.02 – 1.5 lbs ai/A)

Application Methods for Banded Spray Applications:

Banded applications may be used using the following formula to calculate the amount of herbicide needed for orchard or vineyard strip sprays:

Band width in inches
Row width in inches

x Rate per acre broadcast

Amount of herbicide needed for treatment

Application Methods for Spot or Directed-Spray Applications:

For spot or directed spray applications: mix Leopard at 1.7 fluid ounces of product (0.031 lbs ai) per gallon of water. Apply to undesirable vegetation foliage until wet but prior to runoff. Ensure uniform and complete coverage. Thoroughly clean the sprayer following use. **DO NOT** make spot or directed spray applications to tree or vine trunk as injury may occur.

Weeds Controlled in Tree, Vine and Berry Crops: Broadleaf Weeds

Alkali sida	Fleabane, annual	Morningglory, ivyleaf	Smartweed, Pennsylvania
Ammannia, purple	Goosefoot	Morningglory, pitted	Sowthistle, annual
Arrowhead, California	Gromwell, field	Mullein, turkey	Spurge, prostrate
Buckwheat, wild	Groundcherry, cutleaf	Mustard, wild	Starthistle, yellow
Buffalobur	Groundsel, common	Nettle	Sunflower, common
Burclover, California	Henbit	Nightshade, black	Sunflower, prairie
Carpetweed	Jimsonweed	Nightshade, eastern black	Sunflower, volunteer
Chickweed, common	Knotweed	Nightshade, hairy	Swinecress
Chinese thornapple	Kochia	Pennycress	Thistle, Russian
Cocklebur, common	Lambsquarters, common	Pigweed, redroot	Turnip, wild
Copperleaf, Virginia	Lettuce, miner's	Pineapple-weed	Velvetleaf
Cudweed	Lettuce, prickly	Puncturevine	Vervain
Cutleaf eveningprimrose	London rocket	Purslane, common	Vetch
Dodder	Mallow, common	Radish, wild	Virginia copperleaf
Eclipta	Malva (little mallow)	Ragweed, common	Willowherb, panicle
Fiddleneck	Marestail	Ragweed, giant	
Filaree	Mayweed	Redmaids	
Filaree, redstem	Morningglory, entireleaf	Shepherd's-purse	

Grass Weeds

Barnyardgrass Crabgrass, smooth Junglerice Shattercane Bluegrass, annual Cupgrass, woolly Oat, wild Sprangletop Foxtail, giant Panicum, fall Stinkgrass Brome, ripgut Bromegrass, downy Foxtail, green Panicum, Texas Wheat, volunteer Rush. toad** Canarvarass Foxtail, vellow Windarass Ryegrass, annual* Witchgrass Chess, soft Goosegrass Sandbur, field Crabgrass, large Johnsongrass, seedling

Biennial and Perennial Weeds

Horsetail Paragrass Thistle, musk Aster, white heath Clover, red Clover, white Plantain Bindweed, field Lovegrass Torpedograss Bindweed, hedge **Dallisgrass** Mugwort Poison ivy/oak Vaseygrass Dandelion Mullein, common Woodsorrel Bluegrass, Kentucky Quackgrass Bromegrass, smooth Dock, curly Mustard, tansy Rocket, yellow Yarrow, common Bulrush** Dogbank (hemp) Rose, wild Nutsedge, purple Burdock Fescue Nutsedge, yellow Rubus spp.

Spurge, leafy

Thistle, bull

Onion, wild

Orchardgrass

Canada thistle

Clover, Alsike

Restrictions to the Directions For Use on Tree, Vine, and Berry Crops:

Golden rod, gray

Guineagrass

- DO NOT apply more than 164 fluid ounces of Leopard per acre (3 lbs ai/A) to berry bushes and stone fruit in a 12 month period.
- DO NOT make more than 2 applications at a maximum application rate of 82 fluid ounces per acre (1.5 lbs ai/A) per application.
- **DO NOT** apply more than 246 fl oz (4.5 lbs ai/A) of Leopard per acre to tree, nuts, vines, pome fruit, citrus and olives in any calendar year. Maximum application rate of 82 fl oz per acre (1.5 lbs ai/A) per application
- DO NOT graze harvest, and/or feed treated orchard cover crops to livestock.
- DO NOT apply Leopard through any type of irrigation system.
- DO NOT apply Leopard aerially to tree, berry, or vine crops.
- DO NOT apply Leopard within 14 days of nut, fruit, berry, or grape harvest.
- · Applications to citrus fruits, pome fruits and olives must be a minimum of 14 days apart.
- · Applications to stone fruit must be a minimum of 28 days apart.
- DO NOT make spot spray applications to suckers, as tree injury may occur.

Sucker Control with Leopard:

Leopard will reduce or eliminate sucker growth when applied to suckers that are young, green, and uncallused. For sucker control, apply a split application approximately 4 weeks apart at 56.0 fluid ounces of product per acre (1.02 lbs ai/A). Coverage of all sucker foliage is necessary for optimum control. Suckers should not exceed 12 inches in length.

Tank Mix Partner Instructions:

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.

Leopard does not provide residual weed control or control of unexposed plant parts. Certain herbicide tank mixes may aid in the performance of Leopard or be added to provide residual herbicide activity. No additional surfactant is needed with any tank mix partner. Leopard may be applied in tank mix combinations with labeled rates of other products provided these other products are labeled for the timing and method of application for the crop to be treated. The tank mix partner must be used in accordance with the label limitations and precautions. No label dosage rates may be exceeded. Leopard cannot be mixed with any product containing a label prohibition against such mixing.

diuron napropamide oryzalin terbacil flumioxazin simazine

^{*} apply to annual ryegrass prior to 3 inches in height

^{**}indicates suppression

APPLICATION DIRECTIONS FOR POTATO VINE DESICCATION

Application Rates and Timing:

Apply Leopard at the beginning of natural senescence of potato vines. Apply 21.0 fluid ounces per acre (0.38 lbs ai/A). Do not split this application or apply more than 1 application per harvest. Potato varieties with heavy or dense vines may require an application of another desiccation product to complete vine desiccation.

Thorough coverage of the potato vines to be desiccated is essential. Use a sufficient volume of water (20.0 to 100 gallons per acre) to obtain a thorough coverage of the potato vines. Vary the gallons of water per acre and the spray pressure as indicated by the density of the potato vines to assure thorough spray coverage. Increase the spray volume to at least 30.0 gallons of water per acre when the potato vine canopy is dense or under cool and dry conditions. Apply Leopard with the spray boom as low as possible to achieve thorough coverage of the potato vines for best control and to minimize drift potential.

Restrictions to the Directions For Use in Potato Vine Desiccation:

- DO NOT apply more than 21.0 fluid ounces per acre (0.38 lbs ai/A) to potato vines per year.
- DO NOT harvest potatoes until 9 days or more after application of Leopard.
- DO NOT apply to potatoes grown for seed.
- Potatoes, canola, corn, cotton, soybean, and sugar beets may be planted at any time after the application of Leopard as a potato vine desiccant.
- **DO NOT** plant treated areas to wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale until 30 or more days after an application of Leopard as a potato vine desiccant.
- **DO NOT** plant treated areas to crops other than those listed in this use precautions section until 120 or more days after an application of Leopard as a potato vine desiccant.
- **DO NOT** split this application or apply more than one application per harvest.

FALLOW FIELDS OR POST HARVEST

Leopard may be used as a substitute for tillage to control or suppress weeds in the **WEED CONTROL FOR ROW CROPS** section of this label. Applications may be made in fallow fields, post harvest, prior to planting or emergence of any crop listed on this label.

Apply Leopard at 22.0 or 29.0 fluid ounces per acre (0.2 to 0.53 lb ai/A) to fallow fields to control specific weeds. Leopard must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are specified with Leopard to enhance total weed control. When using Leopard in tank mix combinations, follow the precautions and directions of use of the most restrictive label. See **APPLICATION AND MIXING PROCEDURES** section of this label for additional information on how to apply Leopard. See the **PRODUCT INFORMATION** section of this label for rotational crop restrictions.

FARMSTEADS, RECREATIONAL, AND PUBLIC AREAS

When applied as directed, Leopard controls undesirable plant vegetation in non-crop areas around farmstead building foundations, shelter belts, along fences, airports, commercial plants, storage and lumber yards, educational facilities, fence lines, ditch banks, dry ditches, schools, parking lots, tank farms, pumping stations, parks, nonselective farmstead weed control. Refer to the **APPLICATION DIRECTIONS FOR USE ON LISTED TREE, VINE, AND BERRY CROPS** for appropriate application broadcast and spot spray application rates and lists weeds controlled.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Do not use or store near heat or open flame. Keep container tightly closed and dry in a cool, well ventilated place. Storage temperature should not exceed 125° F. If storage temperature of this product is below 32° F, the material should not be pumped until its temperature exceeds 32° F. Protect against direct sunlight.

PESTICIDE DISPOSAL: 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 HANDLING:

[Note to Reviewer: The following statement will be included on all Final Printed Labels bearing multiple Container Handling statements] "NOTE: This product is available in multiple containers. Refer to the Net Contents section of this products labeling for the applicable "No refillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size."

[Note to Reviewer: The bracketed section headers will be included when multiple container types / sizes are listed on the label.]

[Non-refillable Containers 5 Gallons or Less:] Non-refillable 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.

[Non-refillable Containers Larger 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. 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

[Refillable Container:] Refill this container with pesticide only. Do not reuse this container for any other purpose. Close all openings and replace all caps. Contact Nufarm's Customer Service Department at 1-800-345-3330 to arrange for return of the empty refillable container.

SEED DISPOSAL: To dispose of out-of-date or otherwise unmarketable seed from plants, which have been treated with Leopard, broadcast and lightly incorporate seed into field soils using disc or other suitable implement. Any resulting crop may be destroyed by chemical or mechanical means. Alternatively, seed may be destroyed by deep burial, incineration or landfill disposal.

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.

(RV052218)

Leopard is a registered trademark of Nufarm Americas Inc. LibertyLink is a registered trademark of Bayer CropScience

Optional Marketing Claims:

Nufarm Grow a better tomorrow. Grow a better tomorrow.

[Note to reviewer: Any text found in brackets "[" "]" is optional on container label.]
[Note to reviewer: State restrictions will not be found on the container label if the product is not registered in that associated

[Note to reviewer: Making the product more restrictive then Federally accepted, incorporating the optional statement "Not for use in California." may be included on the container label for any use, weed or crop as determined to be necessary to procure CADPR registration.]

LABEL HISTORY

FILE NAME	REVISION MARK	COMMENTS
071368-00XXX.20160126.EPA New	(RV012616)	EPA New
071368-00RRO.20160302.EPA New	(RV030216)	EPA New - Revised
071368-00RRO.20160316.EPA New	(RV031616)	EPA Review
071368-00119.20160421.MASTER	(RV042116)	EPA SAL
071368-00119.20170717.EPA Amendment	(RV071717)	EPA PRIA Amendment
071368-00119.20171218.EPA Amendment	(RV121817)	EPA Review
071368-00119.20180522.EPA Amendment	(RV052218)	EPA Amendment ID for Glufosinate