264-660 3/30/2001 1/22

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

Paul A. Cain, Ph.D.
Registration Manager
Aventis CropScience USA LP
Research Triangle Park, NC 27709

MAR 30 2001

Dear Dr. Cain:

Subject: Liberty® Herbicide
EPA Registration Number 264-660
Application and Letter Dated February 2, 2001, Request To Amend Registration by Updating Direction on Label as Described in the Letter; Re-submission Application and Letter Dated March 9, 2001 To Correct Errors and Revise Proposed Labeling Responding To Discussion of Labeling with Eugene Wilson on February 20, 2001, Revisions Described in Your Letter; and Application and Your Letter Dated March 28, 2001 Request To Amend Registration with an Alternate Formula for This Product

The proposed alternate formula for Liberty Herbicide submitted on EPA Form 8570-4 and dated March 28, 2001 has been reviewed and found as an acceptable amendment to the registration of the subject pesticide product under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as amended. A copy of the alternate formula (Confidential Statement of Formula) has been placed in the EPA record for this product registration.

The proposed labeling submitted with your application dated March 9, 2001 has been reviewed and found acceptable under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, provided that you:

1. Revise the "Tank Mix Recommendations for Liberty® Herbicide" section by deleting the phrase: "following the precautions and directions of use of the most restrictive label", and add the phrase: "carefully follow the "Direction of Use" labeling of the selected partner"; and add the sentence: "Do not use a tank mix partner that has already been applied as a pre-plant incorporated or preemergence herbicide unless the "Directions of Use" labeling of that partner allows sequential applications of it to the same crop".

2. Submit one (1) copy of the final printed label prior to your shipment of the subject pesticide product under the Enclosed stamped label.

If these conditions are not complied with, this registration will be subject to cancellatin in accordance with FIFRA, section

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6(e). Your release for shipment of this product under the subject labeling constitutes acceptance of these conditions.

A stamped copy of the proposed label is enclosed for your records.

Sincerely yours,

for Eugene V. Wilson
Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)

Enclosure

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Liberty® HERBICIDE

A SELECTIVE HERBICIDE FOR USE ONLY ON CORN, SOYBEANS, SUGAR BEETS AND CANOLA TOLERANT TO THE ACTIVE INGREDIENT IN THIS PRODUCT. AVENTIS CROPSCIENCE RECOMMENDS USE ONLY ON SEED DESIGNATED AS LIBERTYLINK® OR WARRANTED BY AVENTIS CROPSCIENCE AS BEING TOLERANT TO LIBERTY® HERBICIDE.

ACTIVE INGREDIENT: Glufosinate-ammonium*	18.19%**
OTHER INGREDIENTS:	81.81%
TOTAL	100.00%

*CAS Number 77182-82-2, protected by U.S. Patent No 4,400,196
**Equivalent to 1.67 pounds of active ingredient per U.S. gallon.

EPA Reg No. 264-660

EPA Est. No. 264-MI-001
EPA Est. No. 407-IA-2

KEEP OUT OF REACH OF CHILDREN
WARNING - AVISO

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.)

For MEDICAL And TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577

For PRODUCT USE Information Call 1-888-AVENTIS (1-888-283-6847)

FIRST AID

If swallowed	• Rinse mouth thoroughly with plenty of water. • Do not induce vomiting. • Get medical attention immediately.
If in Eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Get medical attention if irritation develops or persists.
If on skin or clothing	• Take off contaminated clothing. • Wash skin immediately with plenty of soap and water. • Get medical attention.
If inhaled	• Move person to fresh air. • Get medical attention if breathing difficulty develops.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. Call 1-800-334-7577 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. Additionally, call 1-800-334-7577 immediately for further information.

EPA STAMP

ACCEPTED
with COMMENTS
In EPA Letter Dated
MAR 30 2001
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No.
264-660

EPA STAMP

PRECAUTIONARY STATEMENTS

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HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May be fatal if absorbed through skin. Causes moderate eye irritation. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category C on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

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; chemical resistant footwear plus socks; protective eyewear. Wear a chemical resistant apron when mixing/loading and cleaning equipment.

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

Engineering control 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.

USER SAFETY RECOMMENDATIONS

'sers should:

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

ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present, except as allowed by the Use Directions on this label. 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.

STORAGE AND DISPOSAL

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

Do not use or store near heat or open flame. Keep the container tightly closed and dry in a cool, well-ventilated place. Storage temperature should be between 32°F and 85°F, with a maximum of 125°F. Protect against direct sunlight.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on-site or at an approved waste disposal facility.

CONTAINER DISPOSAL: *[1 and 2½ Gallon Containers Only]*

npty containers should be triple rinsed (or equivalent), then offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill, or / incineration; or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

[15 Gallons, 60 Gallons, 120 Gallons & Bulk Containers Only]

This is a sealed returnable container to be used only for Liberty® Herbicide. When this container is empty, it must not be opened, cleaned, or discarded. Empty containers must be returned to the original purchase location.

SEED DISPOSAL: To dispose of out-of-date or otherwise unmarketable seed from plants which have been treated with Liberty® Herbicide, 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.

DIRECTIONS FOR USE

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

Do not use this product until you have read the entire label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry-interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls 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; chemical resistant footwear plus socks; protective eyewear.

GENERAL INFORMATION

Liberty® Herbicide 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 corn, soybeans, sugar beets and canola.

Liberty® Herbicide may also be used during corn, soybean and rice seed production to remove corn, soybean and rice plants that are not tolerant to glufosinate-ammonium.

IMPORTANT CROP SAFETY INFORMATION

READ BEFORE USING THIS PRODUCT

Liberty® Herbicide is for use only on corn, soybeans, sugar beets and canola tolerant to the active ingredient in this product. Aventis CropScience recommends use only on corn, soybeans, sugar beets and canola designated as LibertyLink® or warranted by Aventis CropScience as being tolerant to Liberty® Herbicide.

The basis of selectivity of Liberty® Herbicide in corn, soybeans, sugar beets and canola is the presence of a gene in LibertyLink® or other Aventis CropScience warranted corn, soybeans, sugar beet and canola varieties which results in a plant that is tolerant to the active ingredient of Liberty® Herbicide. Corn, soybeans, sugar beets and canola not containing this gene will not be tolerant to Liberty® Herbicide and severe injury may result.

Use of Liberty® Herbicide on corn, soybeans, sugar beets or canola not designated as LibertyLink® or not warranted by Aventis CropScience may result in severe crop injury and/or yield loss.

Do not allow spray to contact foliage or green tissue of desirable vegetation other than corn, soybeans, sugar beets and canola tolerant to the active ingredient in this product. This product may injure or kill all green vegetation contacted by the spray other than LibertyLink® corn, soybeans, sugar beet and canola or other corn, soybeans, sugar beet and canola varieties warranted by Aventis CropScience.

Aventis CropScience does not warrant the crop safety or weed control of this product if used on corn, soybean, sugar beet or canola varieties other than those designated as LibertyLink® or warranted by Aventis CropScience to safely withstand the application of Liberty® Herbicide.

CLEANING INSTRUCTIONS

Before using Liberty® Herbicide, thoroughly clean nurse tanks, spray tank, lines, and filter, particularly if a herbicide with the potential to injure crops was previously used. Spray equipment should be thoroughly rinsed using a strong detergent solution.

After using Liberty® Herbicide, triple rinse the spray equipment and clean with a commercial tank cleaner before using for crops not labeled LibertyLink® or warranted by Aventis CropScience. 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.

APPLICATION DIRECTIONS FOR USE ON SUGAR BEETS

THOROUGH SPRAY COVERAGE IS VERY IMPORTANT. Liberty® Herbicide works best when weeds are actively growing. A cultivation may be made at least 5 days before a Liberty® application or 5 days after a Liberty® application.

APPLICATION TIMING

Applications of Liberty® Herbicide on sugar beets may be made from the cotyledon stage up to the 10-leaf stage of the sugar beet. Liberty® Herbicide is a foliar-active material with no soil-residual activity. For best results, apply to emerged, young actively growing weeds. Weeds that emerge after application will not be controlled. Liberty® Herbicide will have an effect on weeds that are larger than the recommended leaf stage, however speed of activity and control may be reduced. 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. Liberty® Herbicide is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

For best weed control and sugar beet yield, Liberty® Herbicide applications should begin when weeds are up to 1 inch in height or diameter. Repeat applications should be made when newly germinated weeds again reach 1 inch in height or diameter. Refer to the *Rate Recommendation Tables for Weed Control In Sugar Beets* for selection of the proper rate dependent upon the weed species present and size. A repeat application of Liberty® Herbicide or a tank mix application with a residual herbicide selected from the tank mix partners recommended on this label will be needed to control weeds that have not yet emerged at the time of application.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON SUGAR BEETS

1. DO NOT apply more than 42 ounces per acre of Liberty® Herbicide in one application and DO NOT apply more than 84 ounces per acre of Liberty® Herbicide on the sugar beet crop per growing season.
2. DO NOT apply Liberty® Herbicide within 60 days of harvesting sugar beets.

3. DO NOT plant rotation crops in a field treated with Liberty® Herbicide for 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale which may be planted 70 days after the last application of this product. Corn, soybeans, canola, and sugar beets tolerant to the active ingredient of Liberty® Herbicide may be planted at any time.
4. DO NOT graze the treated crop or cut for hay.
5. DO NOT add surfactants. Anti-foams or drift control agents may be added if needed.
6. DO NOT apply Liberty® Herbicide if sugar beets show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
7. DO NOT apply this product through any type of irrigation system.

MIXING INSTRUCTIONS

Liberty® Herbicide must be applied with properly calibrated and clean equipment. Liberty® Herbicide is specially formulated to mix readily in water. Prior to adding Liberty® Herbicide to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see *Cleaning Instructions*).

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

1. Fill tank to one-half full with clean water prior to adding Liberty® Herbicide.
2. Add the correct amount of Liberty® Herbicide.
3. Add the remaining amount of water, begin agitation, and spray out immediately.
4. The addition of an anti-foaming agent may reduce foaming, especially when using soft water.

Ensure that all spray system lines including pipes, booms, etc. have the correct concentration of Liberty® Herbicide/water mixture before the application is started. Flush out any remaining air or water from the spray system lines before starting the crop application. Keep bypass line on or near bottom of the tank to minimize foaming. Screen size in nozzles or line strainers should be no finer than 50 mesh.

If the tank mix partners recommended on this label are added, maintain good agitation at all times until contents of the tank are spayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

APPLICATION METHODS

Do not use flood jet nozzles, controlled droplet application equipment or air-assisted spray equipment. Uniform, thorough spray coverage is important to achieve consistent weed control.

Ground application: Refer to the *Rate Recommendation Tables for Weed Control in Sugar Beets* for proper application rates. DO NOT apply when winds are gusty, or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Liberty® Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. Liberty® Herbicide should be applied broadcast in a minimum of 10 gallons of water per acre using a minimum spray pressure of 40 pounds per square inch and a maximum ground speed of 10 mph. The use of 80 degree or 110 degree flat fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Application of the spray at a 45 degree angle forward will result in better spray coverage. Under dense weed/crop canopies, a broadcast rate of 15-20 gallons of water per acre should be used so that thorough spray coverage will be obtained. DO NOT use raindrop nozzles.

Aerial application: Calibrate the spray equipment prior to use. Liberty® Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray coverage, use nozzles to provide 200-350 micron size droplets. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi.

Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Do Not apply when wind causes drift to off-site vegetation.

RATE RECOMMENDATION TABLES FOR WEED CONTROL IN SUGAR BEETS

The rate of Liberty® Herbicide in fluid ounces (pints) of formulated product per acre to be used for the control of weeds at selected heights are shown in the following tables. In weed populations with mixed species, apply the rate needed for all species present.

Grass Weeds Controlled with Liberty® Herbicide

Weed Species	Growth Stage of Weed* (Maximum Height)		Comments on Weed Growth Stage/ Application Timing/ Number of Applications
	20 fl.oz./A (1.25 pt./A)	28 fl.oz./A (1.75 pt./A)	
Barley, volunteer	1 - 2 leaf (2")	3 leaf (3")	Multiple applications may be required
Barnyardgrass	1 - 3 leaf (2")	4 - 5 leaf (3")	Maximum of 1 tiller
Corn, volunteer	1 - 2 leaf (3")	3 - 4 leaf (6")	---
Crabgrass, large	1 - 3 leaf (2")	4 - 5 leaf (3")	Maximum of 1 tiller
Crabgrass, smooth	1 - 3 leaf (2")	4 - 5 leaf (3")	Maximum of 1 tiller
Cupgrass, woolly	1 - 5 leaf (4")	(8")	---
Foxtail, giant	1 - 4 leaf (3")	5 - 6 leaf (4")	Maximum of 2 tillers
Foxtail, green	1 - 4 leaf (3")	5 - 6 leaf (4")	Maximum of 2 tillers

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Weed Species	Growth Stage of Weed* (Maximum Height)		Comments on Weed Growth Stage/ Application Timing/ Number of Applications
	20 fl.oz./A (1.25 pt./A)	28 fl.oz./A (1.75 pt./A)	
Foxtail, yellow	1 - 3 leaf (1")	4 leaf (2")	Apply prior to tillering
Millet, volunteer proso	1 - 3 leaf (2")	4 - 5 leaf (3")	Maximum of 1 tiller
Millet, wild proso	1 - 3 leaf (2")	4 - 5 leaf (3")	Maximum of 1 tiller
Oat, wild	1 - 2 leaf (2")	3 leaf (3")	Maximum of 1 tiller
Panicum, fall	1 - 3 leaf (2")	4 - 5 leaf (3")	Maximum of 1 tiller
Panicum, Texas	1 - 3 leaf (2")	4 - 5 leaf (3")	Maximum of 1 tiller
Sandbur, field	---	1 - 4 leaf (2")	Apply prior to tillering
Wheat, volunteer	1 - 2 leaf (2")	3 leaf (3")	Maximum of 1 tiller

* Apply up to 42 fluid ounces/acre (2.63 pints/acre) if weeds exceed the growth stage shown in the table.

For improved control of heavy populations or larger than recommended volunteer wheat, volunteer barley, yellow foxtail, and wild oats, Liberty® Herbicide can be tank mixed with Assure® II Herbicide, Poast® Herbicide, Prism® Herbicide or Select® 2EC Herbicide.

Perennial Weeds Controlled by Liberty® Herbicide

Weed Species	Growth Stage of Weed* (Maximum Height/Diameter)		Comments on Number of Applications
	20 fl.oz./A (1.25 pt./A)	28 fl.oz./A (1.75 pt./A)	
Quackgrass	---	1 - 3 leaf (3")	Multiple applications required
Sowthistle, perennial	---	1 - 4 leaf (3")	Multiple applications required
Thistle, Canada	---	1 - 4 leaf (3")	Multiple applications required

* Apply up to 42 fluid ounces/acre (2.63 pints/acre) if weeds exceed the growth stage shown in the table.

Broadleaf Weeds Controlled by Liberty® Herbicide

Weed Species	Growth Stage of Weed* (Maximum Diameter)	
	20 fl.oz./A (1.25 pt./A)	28 fl.oz./A (1.75 pt./A)
Buckwheat, wild	1 - 4 leaf (2")	5 - 6 leaf (3")
Buffalobur	1 - 4 leaf (2")	5 - 6 leaf (3")
Carpetweed	---	1 - 4 leaf (2")
Chickweed, common	1 - 4 leaf (2")	5 - 6 leaf (3")
Cocklebur, common	1 - 6 leaf (3")	7 - 8 leaf (5")
Kochia	(1")	(2")
Ladysthumb	1 - 2 leaf (1")	3 - 4 leaf (3")
Lambsquarter, common	1 - 2 leaf (1")	4 - 5 leaf (3")
Mallow, Venice	1 - 4 leaf (2")	5 - 6 leaf (3")
Marshelder	1 - 2 leaf (1")	3 - 4 leaf (2")
Mustard, wild	1 - 4 leaf (2")	5 - 6 leaf (3")
Nightshade, eastern black	1 - 4 leaf (2")	5 - 6 leaf (3")
Pigweed, prostrate	(1")	(3")
Pigweed, redroot	1 - 2 leaf (1")	3 - 4 leaf (3")

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Weed Species	Growth Stage of Weed* (Maximum Diameter)	
	20 fl.oz./A (1.25 pt./A)	28 fl.oz./A (1.75 pt./A)
Pigweed, smooth	1 - 2 leaf (1")	3 - 4 leaf (3")
Pigweed, spiny	1 - 2 leaf (1")	3 - 4 leaf (3")
Purslane, common	(1")	(2")
Ragweed, common	1 - 6 leaf (3")	7 - 8 leaf (5")
Ragweed, giant	1 - 4 leaf (2")	5 - 6 leaf (3")
Sheperd's purse	1 - 4 leaf (2")	5 - 6 leaf (3")
Smartweed, Pennsylvania	1 - 2 leaf (1")	3 - 4 leaf (3")
Sowthistle, annual	1 - 4 leaf (2")	5 - 6 leaf (3")
Sunflower, common	1 - 6 leaf (3")	7 - 8 leaf (5")
Thistle, Russian	(1")	(2")
Velvetleaf	1 - 2 leaf (1")	3 - 4 leaf (3")

* Apply up to 42 fluid ounces/acre (2.63 pints/acre) if weeds exceed the growth stage shown in the table.

APPLICATION DIRECTIONS FOR USE ON CANOLA

To assure the optimum benefit from the use of Liberty® Herbicide, apply when weeds are in an early stage of growth, before they stress the growth of canola. Apply as described in the "Application Methods" section to get maximum weed control.

APPLICATION TIMING

Applications of Liberty® Herbicide on canola may be made from the cotyledon stage up to the early bolting 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. Liberty® Herbicide is a foliar-active material with no soil-residual activity. For best results, apply to emerged, young actively growing weeds. Weeds that emerge after application will not be controlled. Liberty® Herbicide will have an effect on weeds that are larger than the recommended leaf stage, however speed of activity and control may be reduced. 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. Liberty® Herbicide is rainfast 4 hours after application, therefore, rainfall within 4 hours may necessitate retreatment.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON CANOLA

1. DO NOT use on canola in the states of Alabama, Delaware, Georgia, Kentucky, Maryland, New Jersey, North Carolina, South Carolina, Tennessee, Virginia and West Virginia
2. DO NOT apply more than 68 ounces per acre of Liberty® Herbicide for weed control on the canola crop per growing season.
3. DO NOT apply Liberty® Herbicide within 65 days of harvesting canola.
4. DO NOT plant rotation crops in a field treated with Liberty® Herbicide for 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale which may be planted 70 days after the last application of this product. Corn, soybeans, canola, and sugar beets tolerant to the active ingredient in Liberty® Herbicide may be planted at any time.
5. DO NOT graze the treated crop or cut for hay.
6. DO NOT add surfactants or crop oils. Anti-foams or drift control agents may be added if needed.
7. DO NOT apply Liberty® Herbicide if canola shows injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
8. DO NOT apply this product through any type of irrigation system.
9. Do Not tank mix Liberty® Herbicide with other pesticides including herbicides unless recommended on this label.

SPRAY ADDITIVES

Liberty® Herbicide must be applied with ammonium sulfate (AMS). Use only fine feed grade or spray grade AMS at 3 pounds per acre. Anti-foams or drift control agents may be added if needed.

MIXING INSTRUCTIONS

Liberty® Herbicide must be applied with properly calibrated and clean equipment. Liberty® Herbicide is specially formulated to mix readily in water. Prior to adding Liberty® Herbicide to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see *Cleaning Instructions*).

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

1. Fill tank to one-half full with clean water.
2. Add the appropriate amount of AMS to the spray tank.
3. If tank mixing with a grass herbicide specified on this label, add the correct amount of the grass herbicide.
4. Add the correct amount of Liberty® Herbicide.
5. Add the remaining amount of water, begin agitation, and spray out immediately.

The addition of an antifoaming agent may reduce foaming, especially when using soft water.

Ensure that all spray system lines including pipes, booms, etc. have the correct concentration of Liberty® Herbicide/water mixture before the application is started. Flush out any remaining air or water from the spray system lines before starting the crop application. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers should be no finer than 50 mesh.

If the tank mix partners recommended on this label are added, maintain good agitation at all times until contents of the tank are spayed. If the spray mixture is allowed to settle, thorough agitation is required to resuspend the mixture before spraying is resumed.

APPLICATION METHODS

Do not use flood jet nozzles, controlled droplet application equipment or air-assisted spray equipment. Uniform, thorough spray coverage is important to achieve consistent weed control.

Ground application: Refer to the *Rate Recommendation Tables for Weed Control in Canola* for proper application rates. DO NOT apply when winds are gusty, or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Liberty® Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. Liberty® Herbicide should be applied broadcast in a minimum of 10 gallons of water per acre using a minimum spray pressure of 40 pounds per square inch and a maximum ground speed of 10 mph. The use of 80 degree or 110 degree flat fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Application of the spray at a 45 degree angle forward will result in better spray coverage. Under dense weed/crop canopies, a broadcast rate of 15-20 gallons of water per acre should be used so that thorough spray coverage will be obtained.

Aerial application: Calibrate the spray equipment prior to use. Liberty® Herbicide should be applied in a minimum of 5 gallons of water per broadcast acre. To get uniform spray coverage, use nozzles to provide 200-350 micron size droplets. DO NOT use raindrop nozzles. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi.

Avoid application under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. Do Not apply when wind causes drift to off-site vegetation.

RATE RECOMMENDATION TABLES FOR WEED CONTROL IN CANOLA

The rate of Liberty® Herbicide in fluid ounces (pints) of formulated product per acre to be used for the control of weeds at selected heights are shown in the following tables. In weed populations with mixed species, select the rate needed for all species present.

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Grass Weeds Controlled with Liberty® Herbicide at 34 fl. oz./A (2.1 pt./A) Plus Ammonium Sulfate

Weed Species	Growth Stage of Weed (Leaves/Max. Height)	Comments
Barley, volunteer*	1-3 leaves (3")	A second application may be required
Foxtail, yellow	1-4 leaves (2")	Apply prior to tillering
Sandbur, field		
Oat, wild	1-4 leaves (4")	Maximum of 1 tiller; a second application may be required
Wheat, volunteer		
Corn, volunteer	1-4 leaves (6")	---
Barnyardgrass	1-5 leaves (3")	Maximum of 1 tiller
Crabgrass, large		
Crabgrass, smooth		
Millet, volunteer proso		
Millet, wild proso		
Panicum, fall		
Panicum, Texas		
Foxtail, giant	1-6 leaves (4")	Maximum of 2 tillers
Foxtail, green		
Cupgrass, woolly	1-8"	---

* Suppression only

When used in tank-mix combination with Assure® II Herbicide at 4 to 5 fl. oz per acre or Poast® Herbicide at 6 to 8 fl. oz. per acre, Liberty® Herbicide may be applied at 28 fl. oz. per acre plus ammonium sulfate to control grass weed species at the growth stage of weeds indicated in the table above. For improved control of heavy populations or larger than recommended volunteer wheat, volunteer barley, yellow foxtail, and wild oats, Liberty® Herbicide at 34 fl. oz per acre can be tank mixed with Assure® II Herbicide, or Poast® Herbicide.

Perennial Weeds Controlled with Liberty® Herbicide at 34 fl. oz./A (2.1 pt./A) Plus Ammonium Sulfate

Weed Species	Growth Stage of Weed (Leaves/Max. Height)	Comments
Quackgrass	1-4 leaves (4")	Top growth control; a second application may be required.
Sowthistle, perennial	1-6 leaves (4")	
Thistle, Canada		

BroadLeaf Weeds Controlled with Liberty® Herbicide at 28 fl. oz./A (1.75 pt./A) Plus Ammonium Sulfate

11/22

Weed Species	Growth Stage of Weed (Leaves/Max. Height)	Comments
Buckwheat, wild	1-3 leaves	Up to 1" in height
Pigweed, redroot		Up to 2" in height
Carpetweed	1-4 leaves	Up to 2" in height
Lambsquarter, common		
Marshelder		
Ladysthumb		Up to 3" in height
Pigweed, smooth		
Pigweed, spiny		
Smartweed, Pennsylvania		
Velvetleaf		
Mustard, wild	1-5 leaves	Up to 3" in height
Buffalobur	1-6 leaves	Up to 3" in height
Chickweed, common		
Mallow, Venice		
Nightshade, eastern black		
Ragweed, giant		
Shepherd's purse		
Sowthistle, annual		
Cocklebur, common	1-8 leaves	Up to 5" in height
Ragweed, common		
Sunflower, common		
Kochia	1-2"	---
Thistle, Russian		---
Pigweed, prostrate	1-3"	---
Purslane, common		---
Waterhemp, tall		---
Wormwood, biennial		---
Pennycress, field	1-4"	---
Dandelion	1-6"	Diameter of rosette

For optimum canola yield, early weed removal and application prior to canola bolting is important. For optimum control of both early and late germinating grass and broadleaf weed species, Liberty® Herbicide may be applied sequentially at 20 fl. oz./A to 1-3 leaf grass and 1-2" broadleaf weed species followed by a second application of 20 fl. oz./A 7-10 days later.

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APPLICATION DIRECTIONS FOR USE ON FIELD CORN, SILAGE CORN AND SOYBEANS

THOROUGH SPRAY COVERAGE IS VERY IMPORTANT. Visual effects and control from Liberty® Herbicide applications occur within 2 to 4 days after application under good growing conditions. Liberty® Herbicide works best when weeds are actively growing. To maximize weed control, no cultivation should occur in the period from 5 days before an application to 5 days after an application of Liberty® Herbicide.

APPLICATION TIMING

Liberty® Herbicide is a foliar-active material with little or no soil-residual activity. Best results are obtained when applications are made to actively growing weeds. Weeds that emerge after application will not be controlled. Applications of Liberty® following the use of soil-applied insecticides will not injure corn.

Applications of Liberty® Herbicide on corn may be made with over-the-top broadcast or drop nozzles from emergence until corn is 24" tall or in the V-7 stage of growth, i.e., 7 developed collars, whichever comes first. For corn 24" to 36" tall, only apply Liberty® using ground application and drop nozzles and avoid spraying into the whorl or leaf axils of the corn stalks.

Applications of Liberty® Herbicide on soybeans may be made from emergence to the bloom growth stage.

Liberty® Herbicide is rainfast 4 hours after application to most weed species. Rainfall within 4 hours may necessitate retreatment or may result in reduced weed control. Applications should be made between dawn and two hours before sunset to avoid the possibility of reduced control of lambsquarters and velvetleaf. Do not apply when wind causes drift to off-site vegetation as injury may occur. 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.

Apply Liberty® Herbicide at rates of 24 to 34 fluid ounces per acre. Refer to the *Rate Recommendation Tables for Weed Control* for selection of the proper rate dependent upon weed species and size. A repeat application of Liberty® or a tank mix application with a residual herbicide selected from the tank mix partners listed on this label will be needed to control weeds that have not yet emerged at the time of application.

RESTRICTIONS TO THE DIRECTIONS FOR USE ON FIELD CORN, SILAGE CORN AND SOYBEANS

1. DO NOT apply more than two applications of Liberty® Herbicide to the corn or the soybean crop. DO NOT apply more than 62 fluid ounces of Liberty® per acre on corn or soybeans per growing season.
2. DO NOT apply Liberty® Herbicide within 60 days of harvesting corn forage and within 70 days of harvesting corn grain and corn fodder.
3. DO NOT apply Liberty® Herbicide within 70 days of harvesting soybean seed.
4. DO NOT plant rotation crops in a field treated with Liberty® Herbicide for 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale which may be planted 70 days after the last application of this product. Corn and soybeans may be planted at any time.
5. DO NOT harvest treated green soybean plants for forage and hay feed for livestock.
6. DO NOT use nitrogen solutions as spray carriers. A silicone-based antifoam agent may be added if needed.
7. DO NOT apply Liberty® Herbicide if soybeans or corn show injury from prior herbicide applications or environmental stress (drought, excessive rainfall, etc.).
8. DO NOT apply this product through any type of irrigation system.
9. Volunteer LibertyLink® crop plants from the previous season will not be controlled by an application of Liberty® Herbicide.

SPRAY ADDITIVES

For use on corn only, Liberty® Herbicide must be applied with ammonium sulfate (AMS). Use only fine feed grade or spray grade AMS at 3 pounds per acre. Liberty® Herbicide is formulated to provide optimum herbicidal performance. Use of additional surfactants or crop oils will not enhance weed control.

MIXING INSTRUCTIONS

Liberty® Herbicide must be applied with properly calibrated and clean equipment. Liberty® is specially formulated to mix readily in water. Prior to adding Liberty® to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see *Cleaning Instructions*).

Mix Liberty® Herbicide with water to make a finished spray solution as follows:

1. Fill the spray tank half full with water.
2. Start agitation.
3. Prepare a slurry of the proper amount of dry flowable/wettable powder tank mix partners in a small amount of water.
4. Add the slurry of dry materials to the spray tank.
5. Add the appropriate amount of ammonium sulfate (AMS) (for corn use only) to the spray tank.
6. Add the proper amount of liquid tank mix partners.
7. Complete filling the spray tank with water.
8. Add the proper amount of Liberty® Herbicide 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 Liberty® Herbicide/water mixture before the application is started. Flush out any remaining air or water from the spray system lines before starting the crop application. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers should be no finer than 50 mesh.

If tank mix partners recommended 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.

APPLICATION METHOD

Refer to the *Rate Recommendation Tables for Weed Control* in the following section for the proper application rates. Uniform, thorough spray coverage is important to achieve consistent weed control.

Ground Application: Liberty® Herbicide should be applied broadcast in a minimum of 15 gallons of water per acre. Under dense weed/crop canopies, 20 to 40 gallons of water per acre should be used so that thorough spray coverage will be obtained.

Apply Liberty® Herbicide using 80-degree or 110-degree flat-fan nozzles. Select a spray pressure between 30 to 60 pounds per square inch (psi) measured at the nozzle which will achieve a droplet size of about 300 microns. If Turbo TeeJet® spray tips are used, a spray pressure of 60 or more pounds per square inch will be required to get thorough coverage of the weed foliage. Flood-jet nozzles, raindrop nozzles, controlled droplet application equipment, or air-assisted spray equipment do not provide adequate coverage characteristics; and therefore, are not recommended because weed control is likely to be reduced.

DO NOT apply when winds are gusty or when conditions will favor movement of spray particles off the desired spray target. To avoid drift and insure consistent weed control, apply Liberty® Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern.

Aerial Application: Use 34 fluid ounces of Liberty® Herbicide per acre for aerial application. Do not apply more than 62 fl. oz. of Liberty® Herbicide per acre per growing season. Poor coverage will result in reduced weed control. Liberty® Herbicide should be applied in a minimum of 5 gallons per acre with spray nozzle tips and sufficient pressure to provide a uniform pattern and median droplet size of 350 to 450 microns. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi.

Avoid application during conditions when uniform coverage cannot be obtained or where excessive spray drift may occur. Do not apply when wind causes drift to off-site vegetation.

RATE RECOMMENDATION TABLES FOR WEED CONTROL IN CORN AND SOYBEANS

Apply Liberty® Herbicide at rates of 24 to 34 fluid ounces per acre. Rates in ounces of formulated product per acre for the control of weeds at selected heights are shown in the following tables. In weed populations with mixed species, apply at a rate needed for the species that requires the highest rate.

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Grass Weeds Controlled with Liberty® Herbicide Plus Ammonium Sulfate

Weed Species	Maximum Weed Height or Diameter (Inches)		
	24 Fl. Oz./A	28[1] Fl. Oz./A	34 Fl. Oz./A
Barnyardgrass	*	3	4
Bluegrass, annual	*	3	4
Corn, volunteer	*	10[1,2]	12[1,2]
Crabgrass, large	*	3[3]	4[3]
Crabgrass, smooth	*	3[3]	4[3]
Cupgrass, woolly	4	6	8
Foxtail, bristly	3	6	8
Foxtail, giant	3	6	8
Foxtail, giant (ALS resistant)	3	6	8
Foxtail, green	3	6	8
Foxtail, robust purple	3	6	8
Foxtail, yellow	*	3[3]	4[3]
Johnsongrass, seedling	2	6	8
Millet, wild-proso	2	6	7
Millet, proso volunteer	2	6	7
Oat, wild	*	3[3]	4[3]
Panicum, fall	2	3	4
Panicum, Texas	2	4	5
Rice, red	2	4	5
Sandbur, field	*	*	3[3]
Shattercane	*	6	8
Shattercane (ALS resistant)	*	6	8
Signalgrass, broadleaf	2	4	5
Sprangletop	2	4	5
Sorghum, volunteer	*	6	7
Stinkgrass	2	4	5
Witchgrass	2	4	5

* Indicates suppression

[1] Volunteer corn arising from a previous corn crop containing a glufosinate tolerance gene will not be controlled.

[2] A timely cultivation 7 to 10 days after application and/or retreatment within 2 weeks is recommended for controlling dense clumps of volunteer corn arising from a previous corn crop that was not tolerant to glufosinate-ammonium.

[3] Yellow foxtail, field sandbur, crabgrass and wild oats must be treated prior to tiller initiation for best results.

Broadleaf Weeds Controlled with Liberty® Herbicide Plus Ammonium Sulfate

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Weed Species	Maximum Weed Height or Diameter (Inches)		
	24 Fl. Oz./A	28 Fl. Oz./A	34 Fl. Oz./A
Amaranth, Palmer[1]	*	4	6
Beggarweed, Florida	*	4	6
Black medic	3	5	6
Buckwheat, wild	3	6	7
Buffalobur	3	6	7
Burcucumber	3	6	8
Carpetweed	*	4	6
Chickweed, common	3	6	7
Cocklebur, common	3	6	8
Cocklebur, common (ALS resistant)	3	6	8
Copperleaf, hophornbeam	2	4	6
Eclipta	2	4	6
Fleabane, annual	3	6	8
Galinsoga, hairy	3	6	8
Galinsoga, small flower	3	6	7
Groundcherry, cutleaf	2	4	6
Geranium, cutleaf	2	4	6
Java bean	2	4	6
Jimsonweed	3	6	8
Kochia[1]	2	4	6
Kochia (ALS resistant)1	2	4	6
Ladysthumb	3	6	8
Lambsquarters, common[1]	2	4	6
Lambsquarters, common (triazine resistant)	2	4	6
Mallow, common	*	4	6
Mallow, Venice	3	6	7
Marestail	3	6	8
Marshelder	*	4	6
Morningglory, entireleaf[1]	2	6	7
Morningglory, ivyleaf[1]	3	6	7
Morningglory, pitted[1]	2	6	7
Morningglory, smallflower[1]	2	4	6
Morningglory, tall[1]	3	6	7
Mustard, wild	3	6	7
Nightshade, eastern black	3	6	8
Nightshade, hairy	3	6	8
Pennycress	2	4	6
Pigweed, redroot[1]	2	4	6
Pigweed, redroot (ALS resistant)[1]	2	4	6
Pigweed, redroot (triazine resistant)	2	4	6
Pigweed, prostrate[1]	*	4	6
Pigweed, spiny[1]	*	4	6

Weed Species	Maximum Weed Height or Diameter (Inches)		
	24 Fl. Oz./A	28 Fl. Oz./A	34 Fl. Oz./A
Pigweed, smooth[1]	*	4	6
Pigweed, tumble[1]	*	4	6
Puncturevine	*	4	6
Ragweed, common	3	6	8
Ragweed, common (ALS resistant)	3	6	8
Ragweed, giant	3	6	8
Ragweed, giant (ALS resistant)	3	6	8
Sesbania, hemp	3	6	8
Shepherd's-Purse	3	6	8
Sicklepod	3	6	7
Sida, prickly	3	6	7
Smartweed, Pennsylvania	3	6	8
Smellmelon	2	4	6
Sowthistle, annual	3	6	7
Sunflower, common	3	6	8
Sunflower, common (ALS resistant)	3	6	8
Sunflower, volunteer	3	6	8
Thistle, Russian	*	4	6
Velvetleaf[1]	3	5	6
Waterhemp, common[1]	2	4	6
Waterhemp, common (ALS resistant)[1]	2	4	6
Waterhemp, tall[1]	2	4	6

* indicates suppression

1. Tank mixing with atrazine may enhance weed control of this species.

INSTRUCTIONS FOR BIENNIAL/PERENNIAL WEEDS

Liberty® Herbicide applied at 34 fluid ounces per acre will provide top-growth control or suppression of the biennial/perennial weed species shown in the following table. A second application of Liberty Herbicide at 28 fluid ounces per acre or a tank mix with other herbicides selected from those listed on this label is required for control.

***Biennial/Perennial* Weeds Suppressed or Controlled with Liberty® Herbicide Plus Ammonium Sulfate**

Alfalfa	Clover, red	Muhly, wirestem
Artichoke, Jerusalem	Dandelion	Orchardgrass
Bindweed, field	Dock, smooth	Poinsettia, wild
Bindweed, hedge	Dogbane, hemp	Pokeweed
Bluegrass, Kentucky	Goldenrod, gray	Quackgrass
Bromegrass, smooth	Johnsongrass, rhizome	Thistle, bull
Burdock	Milkweed, common	Thistle, Canada
Chickweed, Mouse-ear	Milkweed, honeyvine	Timothy
Clover, Alsike		

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RATE RECOMMENDATION TABLE FOR WEED CONTROL IN CALIFORNIA

Apply Liberty® Herbicide at rates of 16 to 34 fluid ounces per acre. Rates in ounces of formulated product per acre for the control of weeds in California at selected heights are shown in the following table. In weed populations with mixed species, apply at a rate needed for the species that requires the highest rate.

Weeds Controlled in California with Liberty® Herbicide Plus Ammonium Sulfate

Weed Species	Maximum Weed Height (inches)		
	20 Fl. Oz./A	28 Fl. Oz./A	34 Fl. Oz./A
Barnyardgrass	*	3	4
Cocklebur, common	8	12	14
Cocklebur, common (ALS resistant)	8	12	14
Foxtail, bristly	4	6	8
Foxtail, giant	6	10	11
Foxtail, giant (ALS resistant)	6	10	11
Foxtail, green	6	10	11
Foxtail, robust purple	4	6	8
Foxtail, yellow	*	3[1]	4[1]
Henbit	*	2	4
Johnsongrass, seedling	2	6	8
Lambsquarters, common	2	4	5
Lambsquarters, common (triazine resistant)	2	4	5
Malva, common	*	2	4
Morningglory, entireleaf	2	6	7
Morningglory, ivyleaf	4	6	7
Morningglory, pitted	2	6	7
Morningglory, smallflower	2	4	5
Morningglory, tall	4	6	7
Nettle, burning	*	2	4
Nightshade, black	*	4	6
Panicum, fall	2	3	4
Pigweed, redroot	2	4	5
Pigweed, redroot (ALS resistant)	2	4	5
Pigweed, redroot (triazine resistant)	2	4	5
Pigweed, tumble	*	4	5
Purslane, common	*	2	4
Rice, Jungle	*	2	4
Sowthistle, annual	3	6	7
Sunflower, common	8	12	14
Sunflower, common (ALS resistant)	8	12	14
Sunflower, volunteer	6	8	9
Velvetleaf	3	5	6

* indicates suppression

1. Yellow foxtail must be treated prior to tiller initiation for best results.

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TANK MIX RECOMMENDATIONS FOR LIBERTY® HERBICIDE

Liberty® Herbicide (alone and with a tank mix partner listed on this label) may be applied following any corn or soybean pre-plant incorporated or preemergence herbicide applications. When using Liberty® Herbicide in tank mix combinations, follow the precautions and directions of use of the most restrictive label.

Corn Tank Mix Herbicide Partners for Liberty® Herbicide

To enhance weed control and/or provide residual control in corn, Liberty® Herbicide may be mixed with the following herbicides.

2,4-D	Clarity® Herbicide	Marksman® Herbicide
Accent® Herbicide	Distinct™ Herbicide	NorthStar™ Herbicide
Accent® Gold™ Herbicide	Dual II Magnum™ Herbicide	Permit® Herbicide
Atrazine	Exceed® Herbicide	Prowl® 3.3 EC Herbicide
Banvel® Herbicide	Frontier® 6.0 Herbicide	Pursuit® Herbicide
Basagran® Herbicide	FulTime™ Herbicide	Python® WDG Herbicide
Basis Gold® Herbicide	Guardsman® Herbicide	Scorpion® III Herbicide
Beacon® Herbicide	Harness ® Herbicide	Shotgun® Herbicide
Bicep Lite II Magnum® Herbicide	Harness® Xtra Herbicide	Spirit® Herbicide
Bicep II Magnum® Herbicide	Harness® Xtra 5.6L Herbicide	Stinger® Herbicide
Buctril® Herbicide	Hornet® Herbicide	Surpass® EC Herbicide
Buctril® 4EC Herbicide	Laddok® S-12 Herbicide	Surpass® 100 Herbicide
Buctril® + atrazine Herbicide	LeadOff™ Herbicide	Topnotch™ Herbicide
Celebrity™ Herbicide	Lightning™ Herbicide	Tough® 5 EC Herbicide

Apply tank mixes of Lightning and Pursuit only to corn designated as Clearfield™ tolerant and LibertyLink® or warranted by Aventis CropScience as being tolerant to Liberty® Herbicide.

Applications of 2,4-D, Banvel Herbicide, Celebrity Herbicide, Clarity Herbicide, Distinct Herbicide, or Marksman Herbicide, and NorthStar Herbicide to corn during periods of rapid growth may result in temporary leaning or green snap. If these symptoms occur, cultivation should be delayed until after corn is growing normally to avoid breakage. Tank mixing with Prowl 3.3 EC Herbicide may result in reduced control of barnyardgrass, fall panicum, field sandbur, yellow foxtail, and volunteer corn.

Corn Tank Mix Insecticide Partners for Liberty® Herbicide

To provide weed and insect control in corn, Liberty® Herbicide may be mixed with the following insecticides:

Ambush® Insecticide	Furadan® 4F Insecticide	Pounce® 3.2EC Insecticide
Asana® XL Insecticide	Lorsban® 4E Insecticide	Warrior™ Insecticide

Soybean Tank Mix Herbicide Partners for Liberty® Herbicide

To enhance weed control and/or provide residual control in soybeans, Liberty® Herbicide may be mixed with the following herbicides:

Basagran® Herbicide	Manifest™ B Herbicide	Reflex® Herbicide
Blazer® Herbicide	Manifest™ G Herbicide	Resource® Herbicide
Firstrate® Herbicide	Pinnacle® Herbicide	Scepter® Herbicide
Flexstar® HL Herbicide	Poast® HC Herbicide	Select® 2EC Herbicide
Frontier® 6.0 Herbicide	Poast Plus® Herbicide	Storm® Herbicide
Fusilade® DX Herbicide	Prism® Herbicide	Tornado® Herbicide
Fusion® Herbicide	Pursuit® Herbicide	Typhoon® Herbicide
Galaxy® Herbicide	Raptor™ Herbicide	

APPLICATION DIRECTIONS FOR USE IN FIELD CORN SEED AND SOYBEAN SEED PROPAGATION

Liberty® Herbicide may be applied to select out susceptible "segregates", i.e., corn and soybean plants that are not tolerant to glufosinate-ammonium during seed propagation. Inbred lines, plants not possessing glufosinate-ammonium tolerance, will be severely injured or killed if treated with this herbicide. A hooded sprayer may be used to protect corn and soybean plants from coming into contact with the herbicide application.

Rate Recommendations for Seed Production

Corn: For the selection of tolerant corn "segregates", Liberty® Herbicide may be applied at up to 34 fluid ounces per acre plus ammonium sulfate (AMS) at 3 pounds per acre when corn is in the V-3 to V-4 stage of growth, i.e., 3 to 4 developed collars. A second treatment of 28 fluid ounces per acre plus AMS at 3 pounds per acre may be applied when the corn is in the V-6 to V-7 stage of growth or up to 24" tall.

Soybeans: For the selection of tolerant soybean "segregates", Liberty® Herbicide may be applied at up to 34 fluid ounces per acre when soybean is in the third trifoliate stage. A second treatment of 28 fluid ounces per acre may be applied up to the bloom growth stage of soybean.

APPLICATION DIRECTIONS FOR USE IN RICE SEED PROPAGATION

Liberty® Herbicide is to be applied as a foliar spray to selectively remove susceptible "segregates", i.e., undesirable rice plants which are not tolerant to glufosinate-ammonium and to control of a broad spectrum of emerged grass and broadleaf weeds in rice-seed production fields. Inbred lines or breeding material not possessing the glufosinate-ammonium tolerance gene will be severely injured or killed if treated with this herbicide. Apply Liberty® Herbicide exclusively to rice-seed propagation fields in which the desired plants are glufosinate-ammonium tolerant.

THOROUGH SPRAY COVERAGE IS VERY IMPORTANT. Liberty® Herbicide works best when weeds are small, and the crops and weeds are actively growing. Visual effects and control of rice susceptible "segregates" from Liberty® Herbicide applications occur within 2 to 4 days after application under good growing conditions. The ability of Liberty® Herbicide to eliminate rice plants not tolerant to Liberty® Herbicide may be reduced when heavy dew, fog, mist/rain is present on the crop; or when the crop is under stress due to drought, cool temperatures, or extended periods of cloudiness.

Rice fields should be as level as possible and free of large clods to obtain uniform germination of rice and grassy weeds and to ensure uniform flood levels. If necessary, fields may be flushed prior to treatment. If fields are flushed prior to treatment, flush in sufficient time so that the rice and grass/broadleaf weeds are actively growing at time of treatment.

Do not allow spray to contact foliage or green tissue of desirable vegetation other than rice lines in which the desired plants are glufosinate-ammonium tolerant. This product will injure any other green vegetation contacted by the spray.

INSTRUCTIONS FOR SEED HANDLING, STORAGE AND USE

Seed from treated plants must be held in secured storage until used for breeding of glufosinate-ammonium tolerant rice seed, or destroyed. Seed from treated plants must be labeled as follows: "Do Not Use for Feed or Food Purposes. Store Away from Feed and Food Stuffs." In addition, label the seed with the "Seed Disposal" statements found in the "Storage and Disposal" section of this label.

RESTRICTIONS TO THE DIRECTIONS FOR USE

1. DO NOT use rice, any rice processed commodities or rice straw treated with Liberty® Herbicide for food or feed consumption.
2. DO NOT exceed 112 fluid ounces per acre of Liberty® Herbicide per growing season on rice being treated for segregate control in seed production fields.
3. DO NOT plant rotation crops in a field treated with Liberty® Herbicide for 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum and triticale which may be planted 70 days after the last application of this product.
4. DO NOT apply this product through any type of irrigation system.

MIXING INSTRUCTIONS

Liberty® Herbicide must be applied with properly calibrated and clean equipment. Liberty® is specially formulated to mix readily in water. Prior to adding Liberty® to the spray tank, ensure that the spray tank is thoroughly clean, particularly if a herbicide with the potential to injure crops was previously used (see *Cleaning Instructions*).

Mix Liberty® Herbicide with water to make a finished spray solution as follows:

1. Fill the spray tank half full with water.
2. Start Agitation
3. If using a dry flowable/wettable powder tank mix partner recommended on this label, prepare a slurry of the proper amount of the product in a small amount of water.
4. Add the slurry of dry materials to the spray tank.
5. If using a liquid tank mix partner recommended on this label, add the proper amount of the product.
6. Complete filling the spray tank with water.
7. Add the proper amount of Liberty® Herbicide and continue agitation.
8. If foaming occurs, use a silicon based antifoam agent.

Ensure that all spray system lines including pipes, booms and filters have the correct concentration of Liberty® Herbicide/water mixture before the application is started. Flush out any remaining air or water from the spray system lines before starting the crop application. Keep bypass line on or near bottom of tank to minimize foaming. Screen size in nozzles or line strainers should be no finer than 50 mesh.

If the tank mix partners recommended 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.

APPLICATION METHODS

Uniform, thorough spray coverage is important to achieve consistent weed control. For best results, use flat-fan nozzles. Do not use flood-jet nozzles, controlled droplet application equipment, or air-assisted spray equipment.

Ground Application: Refer to the *Rate Recommendation for Seed Production* in the following section for the proper application rates. Avoid application when wind conditions can cause drift to off-site vegetation. To avoid drift and ensure consistent weed control, apply Liberty® Herbicide with the spray boom as low as possible while maintaining a uniform spray pattern. DO NOT apply at ground speeds exceeding 12 mph. Liberty® Herbicide should be applied broadcast in a minimum of 10 gallons of water per acre. Under dense weed/crop canopies, 20 to 40 gallons of water per acre should be used so that thorough spray coverage will be obtained.

The use of 80-degree or 110-degree flat-fan nozzles is highly recommended for optimum spray coverage and canopy penetration. Use a spray pressure of 30 to 60 pounds per square inch (measured at the nozzle). If using Turbo TeeJet® spray tips, use a minimum pressure of 45 pounds per square inch so that thorough spray coverage will be obtained. Do not use raindrop nozzles.

Aerial Application: Refer to the *Rate Recommendation for Seed Production* in the following section for the proper application rates. Liberty® Herbicide should be applied in a minimum of 10 gallons per acre with spray nozzle tips and sufficient pressure to provide a uniform pattern and median droplet size of 200 to 350 microns. Aerial applications with this product should be made at a maximum height of 10 feet above the crop with low drift nozzles at a maximum pressure of 40 psi.

Avoid application during conditions when uniform coverage cannot be obtained. Do not apply when wind conditions can cause drift to off-site vegetation or injury to vegetation contacted by the spray could occur.

SPRAY DRIFT

SENSITIVE AREAS: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitats for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).

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

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

1. The distance of the outer most nozzles on the boom must not exceed ¾ the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where states have more stringent regulations, they should be observed. The applicator should be familiar with and take into account the information covered in the Aerial Drift Reduction Advisory Information.

INFORMATION ON DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

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

CONTROLLING DROPLET SIZE: (This section is advisory in nature and does not supersede the mandatory label requirements)

- Volume - Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- Pressure - Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

  Number of nozzles - Use the minimum number of nozzles that provide uniform coverage.
- Nozzle Orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- Nozzle Type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM LENGTH: (This section is advisory in nature and does not supersede the mandatory label requirements)

For some use patterns, reducing the effective boom length to less than ¾ of the wingspan or rotor length may further reduce drift without reducing swath width.

APPLICATION HEIGHT: (This section is advisory in nature and does not supersede the mandatory label requirements)

Applications should not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT: (This section is advisory in nature and does not supersede the mandatory label requirements)

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

WIND: (This section is advisory in nature and does not supersede the mandatory label requirements)

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

TEMPERATURE AND HUMIDITY: (This section is advisory in nature and does not supersede the mandatory label requirements)

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

TEMPERATURE INVERSIONS: (This section is advisory in nature and does not supersede the mandatory label requirements)

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

Rate Recommendations and Timing for Seed Production

For the selection of susceptible rice "segregates", Liberty® Herbicide must be applied at 56 fluid ounces per acre when rice is in the 1 to 3 leaf stage of growth. A second treatment of 56 fluid ounces per acre must be applied 14 days later or up until the rice is in the mid-tillering state of growth.

WATER MANAGEMENT

A sufficient portion of the target grassy weed plant must be exposed to Liberty® Herbicide for satisfactory control to be achieved. Therefore, if cessary, lower or allow water to recede so that at least 75% of the weed foliage is exposed above the water level. Do not increase the water level for at ast 48 hours following the application of Liberty® Herbicide. The water level may be brought back to normal level following this period.

TANK MIX RECOMMENDATIONS FOR LIBERTY® HERBICIDE USE IN RICE SEED PROPAGATION

When using Liberty® Herbicide in tank mix combinations, follow the precautions and directions of the most restrictive label for the appropriate timing, rate, and crop response information.

1. Southern United States (Arkansas, Louisiana, Mississippi, Missouri, Texas)

To enhance weed control and/or provide residual control in rice, Liberty® Herbicide may be mixed with the following herbicides.

Arrosolo® 3-3E Herbicide

Basagran® Herbicide

Bolero® 8EC Herbicide

Londax® Herbicide

Prowl® 3.3 EC Herbicide

Stam® Herbicide

Permit® Herbicide

California

.o enhance weed control and/or provide residual control in rice, Liberty® Herbicide may be mixed with the following herbicides.

Bolero® 8EC Herbicide

Londax® Herbicide

Stam® Herbicide

Super Wham® Herbicide

FALLOW FIELDS OR POST HARVEST

Liberty® Herbicide may be used as a substitute for tillage to control or suppress weeds in the grass, broadleaf and biennial/perennial weed tables in this label. Applications may be made in fallow fields, post harvest, prior to planting or emergence of any crop listed on this label.

Refer to the *Application Methods* section of this labeling for appropriate application rates to control specific weeds. Liberty® Herbicide must be applied with ammonium sulfate. Tank mixes with 2,4-D, glyphosate or atrazine are recommended with Liberty® Herbicide to enhance total weed control. When using Liberty® Herbicide in tank mix combinations, follow the precautions and directions of use of the most restrictive label.

Do not plant crops in a field treated with Liberty® Herbicide for 120 days after the last application of this product with the exception of wheat, barley, buckwheat, millet, oats, rye, sorghum, and triticale which may be planted 70 days after the last application of this product. Corn, soybeans, sugar beets and canola may be planted at any time.

FARMSTEADS

When applied as recommended, this product controls undesirable plant vegetation in noncrop areas around farmstead building foundations, shelter belts, along fences, and general nonselective farmstead weed control. Refer to the *Application Methods* section of this labeling for appropriate application rates to control specific weeds.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

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Net Contents: 1 Gallon, 2.5 Gallons, 15 Gallons, 60 Gallons, 120 Gallons & Bulk

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