

89168-6

12/10/2012

1/24



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON D C 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Scott Baker
Lighthouse Product Services
3937 Cedarwood Lane
Johnstown, CO 80534

12-10 12

Subject EPA Reg 89168-6 / Liberty 2,4-D Ester 4 Notification

Dear Mr Baker

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 dated 10-18-12 for the product EPA Reg 89168-6 / Liberty 2,4-D Ester 4. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The label submitted with the application has been stamped "Notification" and will be placed in our records. The revised basic csf is acceptable.

If you have any questions please call Erik Kraft at 703-308-9358 or email at Kraft.Erik@epa.gov

Sincerely,

A handwritten signature in black ink, appearing to read "K. Montague".

Kathryn Montague
Product Manager 23
Herbicide Branch
Registration Division (7505P)

2/24



Use read instructions on reverse before completing form

Form Approved OMB No 2070-0080. Approval expires 2 28 95

 United States Environmental Protection Agency Washington DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
--	--	-----------------------

Application for Pesticide - Section I

1 Company/Product Number 89168 6	2 EPA Product Manager Davis	3 Proposed Classification <input type="checkbox"/> None <input checked="" type="checkbox"/> Restricted
4 Company/Product (Name) Liberty 2 4 D Ester 4	PM# 25	
5 Name and Address of Applicant (Include ZIP Code) LIBERTY CROP PROTECTION LLC 3937 CEDARWOOD LANE JOHNSTOWN, CO 80534 <input checked="" type="checkbox"/> Check if this is a new address		6 Expedited Review In accordance with FIFRA Section 3(c)(3) (b)(i) my product is similar or identical in composition and labeling to EPA Reg No _____ Product Name _____

Section - II

<input type="checkbox"/> Amendment Explain below	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> Me Too Application
<input checked="" type="checkbox"/> Notification Explain below	<input type="checkbox"/> Other Explain below

Explanation Use additional page(s) if necessary (For section I and Section II)

Notification of new label and CSF following transfer from the previous registrant

Section - III

1 Material This Product Will Be Packaged In			
Child Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2 Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
<i>* Certification must be submitted</i>		If "Yes" Unit Packaging wgt _____ No per container _____	If Yes Package wgt _____ No per container _____
3 Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4 Size(s) Retail Container 1 2.5 15 30 55 110 275 Gal Bulk	5 Location of Label Directions <input checked="" type="checkbox"/> Attached to container
6 Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph Paper glued Stenciled		<input checked="" type="checkbox"/> Other self adhesive	

Section - IV

1 Contact Point (Complete items directly below for identification of individual to be contacted if necessary to process this application)		
Name Scott Baker <i>Scott Baker</i>	Title Regulatory Agent	Telephone No (Include Area Code) 970 313 6654
Certification I certify that the statements I have made on this form and all attachments thereto are true accurate and complete I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law		6 Date Application Received (Stamped)
2 Signature	3 Title Regulatory Agent	
4 Typed Name Scott Baker	5 Date November 9, 2012	

3/24



October 18 2012

Document Processing Desk (REGIS)
Office of Pesticide Programs
U S Environmental Protection Agency
One Potomac Yard Room S-4900
2777 S Crystal Drive
Arlington VA 22202

Subject LIBERTY 2 4-D Ester 4 EPA Reg No 89168-6

Lighthouse Product Services LLC Regulatory Agent for Liberty Crop Protection LLC is submitting the enclosed documentation to update the EPA files This product was recently transferred to Liberty Please find the following enclosed

- 1 Application Form
- 2 Basic CSF (2 copies)
- 3 Label reflecting new registrant, 1 copy

This submission includes a notification of a new primary brand name company identification EPA Registration number the date code and the Conditions of Sale and Limitation of Warranty and Liability

This notification is consistent with the provisions of PR Notice 98 10 and EPA regulations at 40 CFR 152 46 and no other changes have been made to the labeling or the confidential statement of formula of this product I understand that it is a violation of 18 U S C Sec 1001 to willfully make any false statement to EPA I further understand that if this notification is not consistent with the terms of PR Notice 98 10 and 40 CFR 152 46 this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA

Also revised is the IF SWALLOWED section of First Aid to state Do not give any liquid to the person as this formula contains petroleum distillates and I believe that to be the correct statement the label I was provided from the transferor did not have this language I also removed General from General Information and General Use Directions

Please contact me at 970-313-6654 or by e-mail sbaker@lhpsonline.com if there are any questions or comments concerning this submission

Sincerely,

Scott Baker
Regulatory Agent for Liberty Crop Protection LLC

"SHINING THE LIGHT ON YOUR REGULATORY NEEDS"

4/11/24
Not: Scent in
Acceptable

Liberty 2,4-D Ester 4

For selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures, including Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf

Active Ingredients

2 4-Dichlorophenoxyacetic Acid 2 Ethylhexyl Ester 68 0%

Other Ingredients 32 0%

Total 100 0%

Acid Equivalents 2 4-dichlorophenoxyacetic acid 45% 3 8 lb/gal

This product contains petroleum distillates

Keep Out of Reach of Children

CAUTION PRECAUCION

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

Precautionary Statements

Hazards to Humans and Domestic Animals

Harmful If Swallowed Or Absorbed Through Skin • Prolonged Or Frequently Repeated Skin Contact May Cause Allergic Skin Reactions In Some Individuals Avoid breathing vapors or mists Avoid contact with skin, eyes, or clothing

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 E on an EPA chemical resistance category selections chart

Applicators and other handlers must wear

- Long-sleeved shirt and long pants
 - Chemical-resistant gloves such as Barrier Laminate Nitrile Rubber Neoprene Rubber or ~~Mixton~~
 - Shoes plus socks
 - Protective eyewear
- **Note For containers of over 1 gallon, but less than 5 gallons** Mixers and loaders who do not use a mechanical system (such as probe and pump or spigot) to transfer the contents of this container must wear coveralls or chemical-resistant apron in addition to other required PPE

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 After each day of use clothing or PPE must not be reused until it has been cleaned

Engineering Controls Statements

For containers of 5 gallons or more Do not open pour product from this container A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container If the contents of a non-refillable pesticide container are emptied the probe must be rinsed before removal If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170 240 (d) (4)] the handler PPE requirements may be reduced or modified as specified in the WPS When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides [40 CFR 170 240 (d) (4-6)] the handler PPE requirements may be reduced or modified as specified in the WPS

User Safety Recommendations

Users should

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

First Aid

If swallowed Call a Poison Control Center or doctor immediately for treatment advice Do not give **any** liquid to the person Do not induce vomiting unless told to do so by a Poison Control Center or doctor Do not give anything by mouth to an unconscious person

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 Call a Poison Control Center or doctor for treatment advice

If on skin or clothing Take off contaminated clothing Rinse skin immediately with plenty of water for 15-20 minutes Call a Poison Control Center or doctor for treatment

Note Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment

Note to Physician Contains petroleum distillate - vomiting may use aspiration pneumonia

Environmental Hazards

This product is toxic to fish and aquatic invertebrates Drift or runoff may adversely affect aquatic invertebrates and nontarget plants Do not apply directly to water to areas where surface water is present or to intertidal areas below the mean high water mark Do not contaminate water when disposing of equipment washwaters or rinsate

This chemical has properties and characteristics associated with chemicals detected in groundwater The use of this chemical in areas where soils are permeable particularly where the water table is shallow may result in groundwater contamination Application around a cistern or well may result in contamination of drinking water or groundwater

Mixing and Loading Most cases of groundwater contamination involving phenoxy herbicides such as 2 4-D have been associated with mixing/loading and disposal sites Caution should be exercised when handling 2 4-D pesticides at such sites to prevent contamination of groundwater supplies Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination

Physical or Chemical Hazards

Combustible Do not use or store near heat or open flame

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170 Refer to the label booklet under Agricultural Use Requirements in the Directions for Use section for information about this standard

Refer to label booklet for Directions for Use including Storage and Disposal

Notice Read the entire label Use only according to label directions **Before using this product, read Warranty and Disclaimer at end of label booklet If terms are unacceptable, return at once unopened**

Agricultural Chemical Do not ship or store with food feeds drugs or clothing

Liberty Crop Protection, LLC
3937 Cedarwood Lane
Johnstown, CO 80534

091012

EPA Reg No 89168-6

EPA Est No _____

Net Contents _ gal

6/24

(Booklet cover)

Liberty 2,4-D Ester 4

For selective control of many broadleaf weeds in certain crops, including, cereal grains (wheat, barley, millet, oats and rye), corn (field corn, popcorn and sweet corn), fallow land and crop stubble, sorghum (grain and forage sorghum), and soybeans (preplant burndown application only), forests, rangeland and established grass pastures, including Conservation Reserve Program (CRP) acres, non-cropland, grasses grown for seed or sod, and ornamental turf

Active Ingredients

2 4-Dichlorophenoxyacetic Acid 2-Ethylhexyl Ester

68 0%

Other Ingredients

32 0%

Total

100 0%

Acid Equivalents 2 4-dichlorophenoxyacetic acid 45% - 3 8 lb/gal

This product contains petroleum distillates

Keep Out of Reach of Children

CAUTION PRECAUCION

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

Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard 40 CFR part 170 Refer to the label booklet under Agricultural Use Requirements in the Directions for Use section for information about this standard

Refer to inside of label booklet for additional precautionary information including Personal Protective Equipment (PPE), User Safety Recommendations and Directions for Use including Storage and Disposal

Notice Read the entire label Use only according to label directions Before using this product, read Warranty and Disclaimer at end of label booklet If terms are unacceptable, return at once unopened

Agricultural Chemical Do not ship or store with food feeds drugs or clothing

Liberty Crop Protection, LLC

3937 Cedarwood Lane

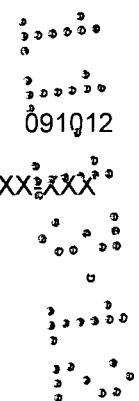
Johnstown, CO 80534

EPA Reg No 89168-5

Net Contents _____ gal

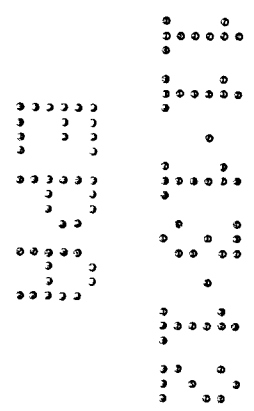
EPA Est No XXXXX-XXXXXX

091012



7/24

Table of Contents	Page
Precautionary Statements	
Hazards to Humans and Domestic Animals	
Personal Protective Equipment	
Engineering Controls Statements	
User Safety Recommendations	
First Aid	
Environmental Hazards	
Physical or Chemical Hazards	
Directions for Use	
Agricultural Use Requirements	
Non-Agricultural Use Requirements	
Storage and Disposal	
Information	
Use Precautions and Restrictions	
Avoiding Injury to Non-target Plants	
Spray Drift Precautions	
Spray Drift Management (Aerial Application)	
Aerial Drift Reduction Advisory	
Mixing Instructions	
Application Instructions	
Weeds Controlled	
Crop Uses	
Blueberries (low bush) in Maine Only	
Cereal Grains (Wheat Barley Millet Rye Oats)	
Conservation Reserve Program Acres (See Rangeland and Permanent Grass Pastures)	
Corn (Field Corn Popcorn and Sweet Corn)	
Fallowland and Crop Stubble	
Field Corn (See Corn)	
Sorghum (Grain Sorghum (Milo) and Forage Sorghum)	
Soybeans (Preplant Only)	
Forestry, Rangeland, Established Pastures, and Non-cropland Uses	
Forests	
Rangeland and Established Grass Pastures (Including Perennial Grasslands not in Agricultural Production Such as Conservation Reserve Program Acres) Non-cropland	
Turf Uses	
Grasses Grown for Seed or Sod	
Ornamental Turf	
Conditions of Sale and Limitation of Warranty	



8/24

Precautionary Statements - Hazards to Humans and Domestic Animals

CAUTION PRECAUCION

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

Harmful if swallowed or absorbed through skin Avoid breathing vapors or mists Avoid contact with skin, eyes, or clothing Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals

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 E on an EPA chemical resistance category selections chart

Applicators and other handlers must wear

- Long-sleeved shirt and long pants
- Chemical-resistant gloves such as Barrier Laminate Nitrile Rubber Neoprene Rubber or Viton
- Shoes plus socks
- Protective eyewear
- **Note For containers of over 1 gallon, but less than 5 gallons** Mixers and loaders who do not use a mechanical system (such as probe and pump or spigot) to transfer the contents of this container must wear coveralls or chemical resistant apron in addition to other required PPE

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 After each day of use clothing or PPE must not be reused until it has been cleaned

Engineering Controls Statements

For containers of 5 gallons or more Do not open pour product from this container A mechanical system (such as probe and pump or spigot) must be used for transferring the contents of this container If the contents of a non-refillable pesticide container are emptied the probe must be rinsed before removal If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170 240 (d) (4)] the handler PPE requirements may be reduced or modified as specified in the WPS

When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protections Standard (WPS) for agricultural pesticides (40 CFR 170 240 (d) (4-6)] the handler PPE requirements may be reduced or modified as specified in the WPS

User Safety Recommendations

Users should

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

First Aid

If swallowed Call a Poison Control Center or doctor immediately for treatment advice Do not give any liquid to the person Do not induce vomiting unless told to do so by a Poison Control Center or doctor Do not give anything by mouth to an unconscious person

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 Call a Poison Control Center or doctor for treatment advice

If on skin or clothing Take off contaminated clothing Rinse skin immediately with plenty of water for 15-20 minutes Call a Poison Control Center or doctor for treatment

Note Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment

Note to Physician Contains petroleum distillate - vomiting may cause aspiration pneumonia

Environmental Hazards

This product is toxic to fish and aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. Do not apply directly to water to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Mixing and Loading Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

Physical or Chemical Hazards

Combustible. Do not use or store near heat or open flame.

Directions for Use

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

Read all Directions for Use carefully before applying.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift.

Only protected handlers may be in the area during application. For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Agricultural Use Requirements

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 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
- Chemical-resistant gloves such as Barrier Laminate, Nitrile Rubber, Neoprene Rubber, or Viton
- Shoes plus socks
- Protective eyewear

Non-agricultural Use Requirements

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

Use Requirements for Rangeland, Pasture and Non-cropland Areas

No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is applied to rangeland, pasture, or non-cropland areas that are not harvested for hay or seed.

Use Requirements for Turf

Restricted Entry Interval: When used on grass seed crops, follow PPE and reentry instructions in the Agricultural Use Requirements section of this label. For use on other turf areas, do not allow people (other than applicator) or pets on treatment area during application. Do not enter into treated areas until sprays have dried.

10/24

Storage and Disposal

Do not contaminate water food or feed by storage or disposal

Pesticide Storage Keep container tightly closed when not in use If exposed to subfreezing temperatures the product should be warmed to at least 40°F and mixed thoroughly before using

Pesticide Disposal Pesticide wastes are toxic Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law and may contaminate groundwater If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance

Container Disposal Nonrefillable container Do not reuse or refill this container Triple rinse or pressure rinse container (or equivalent) promptly after emptying 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

Triple rinse as follows

Containers 5 gallons or less 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 ¼ 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 Once cleaned offer for recycling or reconditioning if appropriate

Containers larger than 5 gallons Empty the remaining contents into application equipment or a mix tank Fill the container ¼ full with water Replace and tighten closures Tip container on its side and roll back and forth ensuring at least one complete revolution for 30 seconds Stand the container on its end and tip 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 a mix tank or store rinsate for later use or disposal Repeat this procedure two more times

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

Refillable Containers Return container to point of purchase for reuse with seal intact and in sellable condition

Refill this container with pesticide only Do not reuse this container for any other purpose

Before refilling inspect thoroughly for damage such as cracks punctures bulges dents abrasions and damaged or worn threads on closure devices

After filling and before transporting check for leaks Do not refill or transport damaged or leaking container

Cleaning this 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 mix tank Fill the container about 10 percent full with water Agitate vigorously or recirculate water with the pump for 2 minutes Pour or pump rinsate into application equipment or rinsate collection system Repeat this rinsing procedure two more times]

General Consult federal state or local disposal authorities for approved alternate procedures Be sure that use of this product conforms to all application regulations

•••••

Product Information

Liberty 2 4-D Ester 4 herbicide is intended for selective control of many broadleaf weeds in certain crops including cereal grains (wheat barley millet oats and rye) corn (field corn popcorn and sweet corn) fallow land and crop stubble sorghum (grain and forage sorghum) and soybeans (preplant burndown application only) forests rangeland and established grass pastures including Conservation Reserve Program (CRP) acres non-cropland grasses grown for seed or sod and ornamental turf

Apply Liberty 2 4-D Ester 4 as a water or oil-water spray during warm weather when weeds or woody plants are actively growing Application under drought conditions will often give poor results Use low spray pressure to minimize drift Generally the lower dosages specified on this label will be satisfactory for young succulent growth of susceptible weed species For less susceptible species and under conditions where control is more difficult use higher specified rates Deep-rooted perennial weeds such as Canada thistle and field bindweed and many woody plants usually require repeated applications for satisfactory control Consult your State Agricultural Experiment stations or Extension Service Weed Specialists for recommendations from this label that best fit local conditions

•••••

•••••

•••••

•••••

•••••

•••••

•••••

•••••

•••••

•••••

•••••

•••••

11/24

Product Use Precautions and Restrictions

Chemigation Do not apply this product through any type of irrigation system
Excessive amounts of 2 4-D in the soil may temporarily inhibit seed germination and plant growth

Avoiding Injury to Non-target Plants

Spray drift produced during application is the responsibility of the applicator and care should be taken to minimize off-target movement of spray during application. A drift control agent suitable for agricultural use may be used with this product to aid in reducing spray drift. If used, follow all uses specified and precautions on the product label.

Do not apply where drift may be a problem due to proximity to susceptible crops or other desirable broadleaf plants Do not apply Liberty 2 4-D Ester 4 directly to or otherwise permit contact with cotton flowers, fruit trees, grapes, ornamentals, vegetables, or other desirable plants that are susceptible to 2 4-D herbicides. Do not permit spray mist containing 2 4-D to contact susceptible plants since even very small quantities of the spray, which may not be visible, can cause severe injury during either active growth and dormant periods. Do not use in greenhouses.

Ground Equipment With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible, by applying 10 gallons or more of spray per acre, by using no more than 20 pounds spraying pressure and large droplet producing nozzle tips, by spraying when wind velocity is low, and by stopping all spraying when wind exceeds 10 miles per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine-droplet spray.

Avoid Movement of Treated Soil Do not apply under conditions that favor movement of treated areas containing susceptible plants. Wind-blown dust containing 2 4-D may produce visible symptoms when deposited on susceptible plants, however, serious plant injury is unlikely. To minimize potential movement of 2 4-D on wind-blown dust, avoid treatment of powdery dry or light sandy soils until soil is settled by rainfall or irrigation or irrigate soon after application.

Do not store or handle other agricultural chemicals with the same containers used for Liberty 2 4-D Ester 4. Do not apply other agricultural chemicals or pesticides with equipment used to apply Liberty 2 4-D Ester 4 unless equipment has been thoroughly cleaned to remove all traces of 2 4-D.

Spray Drift Management (Aerial Application)

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 formulations.

1. The distance of the outer most nozzles on the boom must not exceed 3/4 the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees. 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 following Aerial Drift Advisory Information section.

Aerial Spray Drift Advisory Information

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

Controlling Droplet Size

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

Pressure-Use the lower spray pressures specified for the nozzle. Higher pressure reduces droplet size and does not improve canopy penetration. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

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

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

Nozzle Type-Use a nozzle type that is designed for the intended application. With most nozzle types

narrower spray angles produce larger droplets Consider using low-drift nozzles Solid stream nozzles oriented straight back produce larger droplets than other nozzle types

Boom Length-For some use patterns reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width

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

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

Wind Drift potential is lowest between wind speeds of 2-10 mph However many factors including droplet size and equipment type determine drift potential at any given speed Application must 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 drift

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

Temperature Inversions Applications must not occur during a 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 connected cloud (under low wind conditions) indicates an inversion while smoke that moves upwards and rapidly dissipates indicates good vertical air mixing

Sensitive Areas The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g residential areas bodies of water known habitat for threatened or endangered species non-target crops) is minimal (e.g when wind is blowing away from the sensitive areas)

Mixing Instructions

- 1 Fill the spray tank about half full with water then add the required amount of Liberty 2 4-D Ester 4 with agitation and finally the rest of the water
 - Note** Liberty 2 4-D Ester 4 in water forms an emulsion that tends to separate unless the mixture is kept agitated
- 2 If oil is added first mix the Liberty 2 4-D Ester 4 and the oil and then add this mixture to the water However with adequate agitation the oil can be added after Liberty 2 4 D Ester 4 is mixed with water
- 3 If straight oil is used a solution is formed and separation does not occur Do not allow any water to get into the oil herbicide mixture to avoid formation of an invert emulsion

Note Adding oil wetting agent or other surfactant to the spray mixture may increase effectiveness on weeds but also may reduce selectivity in crops resulting in crop damage

Tank Mixing Precautions

- Read carefully and follow all applicable use directions precautions and limitations on the respective product labels
- Do not exceed specified application rates Do not tank mix with another pesticide product that contains the same active ingredient as this product unless the label of either tank mix partner specifies the maximum dosages that may be used

Tank Mix Compatibility Testing A jar test is recommended prior to tank mixing to ensure compatibility of this product and other pesticides Use a clear glass quart jar with lid and mix the tank mix ingredients in their relative proportions Invert the jar containing the mixture several times and observe the mixture for approximately 1/2 hour If the mixture balls-up forms flakes sludge s jels oily films or layers of other precipitates it is not compatible and the tank mix combination should not be used

Mixing with Liquid Nitrogen Fertilizer

This product may be combined with liquid nitrogen fertilizer suitable for foliar application to accomplish broadleaf weed control and fertilization of corn small grains or pastures in a single operation Use Liberty 2 4-D Ester 4 in accordance with recommendations for these crops provided in this label Use liquid fertilizer at rates

specified by the supplier or Extension Service Specialist Test for mixing compatibility by mixing spray ingredients in correct proportions in a clear glass jar before mixing in spray tank A compatibility aid such as Unite or Compex may be needed in some situations Compatibility is best with liquid fertilizer solutions containing only nitrogen Mixing with N-P-K solutions may not be satisfactory even with the addition of a compatibility aid Pre-mixing Liberty 2 4-D Ester 4 with 1 to 4 parts water may help in situations when mixing difficulty occurs

Fill the tank about half full with the liquid fertilizer then add the required amount of Liberty 2 4-D Ester 4 with agitation Maintain agitation and complete filling the tank with liquid fertilizer Apply immediately and continue agitation in spray tank during application **Do not store the spray mixture** Application during very cold weather (near freezing) is not advisable

Sprayer Clean-Out

To avoid injury to desirable plants equipment used to apply this product should be thoroughly cleaned before re-use or applying other chemicals

- 1 Rinse and flush application equipment thoroughly after use at least three times with water Dispose of all rinse water by application to treatment area or apply to non-cropland area away from water supplies
- 2 During the second rinse add 1 qt of household ammonia for every 25 gallons of water Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 min) Let the solution stand for several hours preferably overnight
- 3 Flush the solution out of the spray tank through the boom
- 4 Rinse the system twice with clean water recirculating and draining each time
- 5 Remove nozzles and screens and clean separately
- 6 If equipment is to be used to apply another pesticide or agricultural chemical to a 2 4-D susceptible crop additional steps may be required to remove all traces of 2 4-D including cleaning of disassembled parts and replacement of hoses or other fittings that may contain absorbed 2 4-D

Application Instructions

Spray Volume Apply with calibrated air or ground equipment using sufficient spray volume to provide adequate coverage of target weeds or as otherwise directed in specific use directions For broadcast application apply the specified rate of this product in a spray volume of 2 or more gallons per acre by air and 10 or more gallons per acre for ground equipment Use low-pressure sprays to minimize drift Where states have regulations that specify minimum spray volumes they should be observed In general spray volume should be increased as crop canopy height and weed density increase in order to obtain adequate spray coverage **Do not apply less than 2 gallons total spray volume per acre**

Application Rates Generally lower rates in specified rate ranges will be satisfactory for more sensitive weeds species when weeds are small and when environmental conditions are favorable for rapid growth Use higher rates in the specified rate range for less sensitive species and under less favorable growing conditions For crop uses do not mix with oil or other adjuvants unless specifically recommended on this label Deep-rooted perennial weeds such as Canada thistle and field bindweed and many woody plants usually require repeated applications for effective control

Spot Treatments

To prevent misapplication spot treatments should be applied with a calibrated boom or with hand sprayers using a fixed spray volume per 1 000 sq ft as indicated below

Hand-Held Sprayers Hand-held sprayers may be used for spot applications of Liberty 2 4-D Ester 4 on labeled crops Care should be taken to apply the spray uniformly and at a rate equivalent to a broadcast application Application rates in the table are based on a treatment area of 1 000 sq ft Mix the amount of Liberty 2 4-D Ester 4 (fl oz or ml) corresponding to the desired broadcast rate in one (1) or more gallons of spray volume calculate the amount of Liberty 2 4-D Ester 4 required for larger areas multiply the table value (fl oz or ml) by the number of thousands of sq ft of area to be treated An area of 1000 sq ft is approximately 10 5 X 10 5 yards (strides) in size To calculate the amount of Liberty 2 4-D Ester 4 required for a broadcast rate higher than those listed use a multiple of the table value for example if a spot treatment requires the equivalent of an 8 pt per acre use 2X the amount per gallon of spray required for the 4 pt/acre rate

Rate Conversion Table for Spot Treatment

Label Broadcast Rate (pt/acre)							
1/2	2/3	3/4	1	2	3	4	8
Equivalent Amount of Liberty 2,4-D Ester 4 per 1000 sq ft							
1/5 fl oz * (5.5 ml)	1/4 fl oz (7.3 ml)	1/3 fl oz (8.3 ml)	3/8 fl oz (11 ml)	3/4 fl oz (22 ml)	1 fl oz (33 ml)	1 1/2 fl oz (44 ml)	3 fl oz (88 ml)

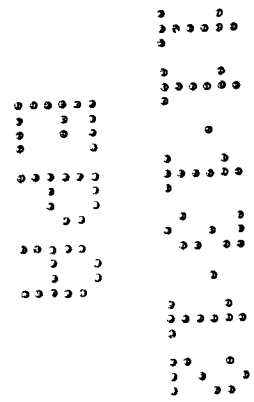
Conversion factors 1 pt = 16 fl oz 1 fl oz = 29.6 (30) ml

14/24

Band Application Liberty 2 4-D Ester 4 may be applied as a band treatment Use the formulas below to determine the appropriate rate and volume per treated acre

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast rate} = \text{Band rate per treated acre}$$

$$\frac{\text{Band width in inches}}{\text{Row width in inches}} \times \text{Broadcast volume} = \text{Band volume per treated acre}$$



Weeds Controlled

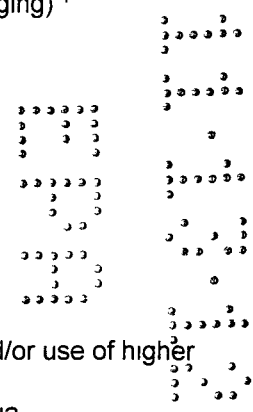
Annual or Biennial Weeds

- beggarticks ¹
- bittercress smallflowered²
- bitterweed
- broomweed common ¹
- burdock common
- buttercup smallflowered^{1 2}
- carpetweed
- cinquefoil common²
- cinquefoil rough ²
- cocklebur common
- coffeeweed
- copperleaf Virginia ²
- croton Texas
- croton woolly
- flixweed
- galinsoga
- geranium Carolina ²
- hemp wild
- horseweed (marestail) ²
- jewelweed
- jimsonweed knotweed²
- kochia
- lambsquarters common
- lettuce prickly ^{1 2}
- lettuce wild
- lupines
- mallow little ¹
- mallow Venice ¹
- marshelder
- morningglory annual
- morningglory ivy
- morningglory woolly
- mousetail ²
- mustards (except blue mustard)
- parsnip wild
- pennycress (fanweed)
- pepperweeds (*Lepidium* spp) ^{1 2}
- pigweeds (*Amaranthus* spp) ¹
- poorjoe
- primrose common
- purslane common ²
- pusley Florida
- radish wild
- ragweed common
- ragweed giant
- rape wild
- rocket yellow
- salsify common ¹
- salsify western ¹
- shepherdspurse
- sicklepod

- smartweed (annual species) ^{1 2}
- sneezeweed bitter
- sowthistle annual
- sowthistle spiny
- spanishneedles
- sunflower
- sweetclover
- tansy mustard
- thistle bull
- thistle musk ¹
- thistle Russian (tumbleweed) ¹
- velvetleaf
- vetches

Perennial Weeds

- Alfaifa ^{1 2}
- artichoke Jerusalem ¹
- aster many-flower ¹
- Austrian fieldcress ¹
- bindweed (hedge field and European) ^{1 2}
- blue lettuce
- blueweed Texas
- broomweed
- bullnettle ^{1 2}
- carrot wild ¹
- catnip
- chicory
- clover red ^{1 2}
- coffeeweed
- cress hoary ¹
- cutleaf ²
- dandelion ¹
- docks ¹
- dogbanes ¹
- evening primrose
- goldenrod
- garlic wild ¹
- hawkweed orange ¹
- healal
- ironweed western ²
- ivy ground ¹
- Jerusalem-artichoke
- loco bigbend
- nettles (including stinging) ¹
- onion wild ¹
- pennywort
- plantains
- ragwort tansy ¹
- sowthistle perennial
- thistle Canada ^{1 2}
- vervains ¹
- wormwood



¹ These weeds are only partially controlled and may require repeat applications and/or use of higher specified rates of this product even under ideal conditions of application
² This product may not be used to control this weed species in the state of California

16/24

Crop Uses

Agricultural Use Requirements for Crops For the following crop uses follow PPE and Reentry instructions in the Agricultural Use Requirements section of this label

Control of Woody Weeds in Low-Bush Blueberry Fields in Maine

Crop/Application Timing	Liberty 2,4-D Ester 4 (rate)	Specific Use Directions
Postemergence	2 qt/100 gal	Make directed wipe or spot applications during June and July when weed tops have emerged sufficiently above the blueberry stems to allow treatment of the weeds without contacting blueberry plants Use Precautions Do not allow spray solution to contact blueberry plants Do not harvest-rake field during the herbicide treatment year or until a two-year interval thereafter Apply only during the year before the first burn To use this method of weed control two-year burns should be extended to three years
Postharvest	1 qt/10 gal of oil	Make directed applications to cut stems of invading woody plants growing in the row or row middles in summer or fall after harvest Do not allow spray solution to contact blueberry stems

Cereal Grains (Wheat, Barley, Millet, Oats, Rye) - (Not Underseeded with Legumes)

Crop/Application Timing	Liberty 2,4-D Ester 4 (pt/acre)	Specific Use Directions
Wheat, Barley, Millet, Rye Annual and biennial broadleaf weeds	1/2 to 2 ¹	Apply after crop is fully tillered but before boot stage of growth (usually 4 to 8 inches tall) and weeds are small Do not apply before tillering or from early boot through the milk stage of growth
Perennial broadleaf weeds	1 to 2 ¹	
Oats (Spring Seeded) (Fall Seeded Southern)	1/2 3/4 to 1 1/4 ¹	Apply after crop is fully tillered but before boot stage of growth (usually 4 to 8 inches tall) and weeds are small Do not apply before tillering or from early boot through the milk stage of growth Do not apply during or immediately following cold weather
Preharvest application (all cereals)	1	Apply using air or ground equipment to control weeds that could interfere with harvest or to suppress perennial weeds Apply when grain is in dough stage Do not apply from early boot through the milk stage of growth

¹ Use the lower rate in the rate range if small annual or biennial weeds are the major problem Use the higher rate if perennial weeds or annual or biennial weeds are present which are considered to be hard to kill as determined by local experience Higher rates increase the risk of crop injury and should be used only where weed control justifies such risk Do not apply Liberty 2 4 D Ester 4 at the crop seedling stage of growth Consult state agricultural experiment station or extension service weed specialists for recommendations or suggestions to fit local conditions

Restrictions

- **Grazing and Haying Restrictions** Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 14 days after treatment Do not harvest for hay or harvest grain within 14 days after application
- Do not apply more than 3.5 pt/acre of Liberty 2 4-D Ester 4 per use season

Corn (Field Corn, Popcorn and Sweet Corn)

Application Timing/ Stage of Growth	Liberty 2,4-D Ester 4 (pt/acre)	Specific Use Directions
Preplant (Burndown) Preemergence (Field corn popcorn and sweet corn)	1 to 2	For best results growth conditions should be favorable for active weed growth Use high rate in rate range for less susceptible weeds cover crops such as alfalfa weeds in advanced stages of development or under less favorable growth conditions Preplant Apply 7 to 14 days before planting corn to control emerged broadleaf weed seedlings or existing cover crops Preemergence Apply any time after planting but before corn emerges to control broadleaf weed seedlings or existing cover crops Do not use on light sandy soils
Postemergence (Field corn popcorn and sweet corn) Annual broadleaf weeds Crop up to 8 inches tall Crop 8 inches tall to tasseling (directed spray only) Perennial broadleaf weeds	1/2 to 1 1 1	Apply when weeds are small and corn is less than 8 inches tall (to top of canopy) If corn is more than 8 inches tall use drop nozzles to keep spray off foliage Treat perennial weeds when they are in bud to bloom stage Do not tank mix with atrazine oil or other adjuvants Do not apply from tasseling to hard dough stage Note Corn treated with 2 4-D may become temporarily brittle Sweet Corn To minimize potential for crop injury use only lowest rate in rate range
Preharvest (Field corn or popcorn only)	up to 3	Apply after corn is in hard dough (or denting) stage Do not apply to sweet corn

Precautions

- Corn hybrids vary in tolerance to 2 4-D Some are easily injured Apply only to varieties known to be tolerant to 2 4-D Consult the seed company or your Agricultural Experiment Station or extension Service Weed Specialist for this information
- After postemergence application delay cultivation for 8 to 10 days to allow corn to overcome any temporary brittleness

Restrictions (Field Corn and Popcorn)

- **Preharvest interval** Do not harvest for grain or fodder within 7 days after application
- Do not apply more than 6 0 pt/acre of Liberty 2 4-D Ester 4 per use season

Restrictions (Sweet Corn)

- **Preharvest interval** Do not harvest within 45 days after application or permit meat or dairy animals to forage or graze treated area within 7 days after application
- Do not make a postemergence application any less than 21 days after a prior application
- Do not apply more than 3 0 pt/acre of Liberty 2 4-D Ester 4 per use season

Fallowland and Crop Stubble - Fallowland is idle land postharvest to crops or between crops

Type of Weeds	Liberty 2,4 D Ester 4 (pt/acre)	Specific Use Directions
Annual broadleaf weeds	1 to 2	Use lower rate in rate range when weeds are small (2 to 3 inches) and conditions are favorable for active growth and a higher rate when weeds are larger and/or growing conditions are less favorable
Biennial broadleaf weeds	2 to 4	Apply when musk thistles or other biennial species are in the seedling to rosette stage and before development of flower stalks

		Use lower rates in the spring during the rosette stage and the highest rate in the fall or when flower stalks have developed
Perennial broadleaf weeds	2 to 4	Apply when perennial weeds are in bud or bloom stage and actively growing Do not disturb treated areas for at least 2 weeks after application or until top growth is dead
Wild garlic and onion in crop stubble	4	Apply to new regrowth of wild garlic or onion that occurs in the fall after harvest of other crops

Precautions and Restrictions

- **Grazing and Haying Restrictions** In grazed areas do not apply more than 4 pt/acre of Liberty 2 4-D Ester 4 per application
- Do not harvest forage or hay from treated areas for 7 days after application If treated area is grazed within 30 days of application withdraw meat animals at least 3 days before slaughter
- Do not re-apply within 30 days of a previous application
- For grazed areas do not apply more than 4 0 pt/acre of Liberty 2 4-D Ester 4 per application
- Limited to 2 applications per year

Planting in Treated Areas

Labeled Crops Within 29 days after an application of this product plant only those crops listed on this or other registered 2 4-D labels Follow more specific limitations if any provided in directions for specific crops Labeled crops may be at risk of crop injury or loss if planted soon after application especially during the first 14 days Degradation factors described below should be considered in weighing this risk

Other Crops All other crops may be planted 30 or more days after application without concern for illegal residues in the planted crop However under certain conditions there may be a risk of injury to susceptible crops Degradation factors described below should be considered in weighing this risk Under normal conditions any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed since application

Degradation Factors When planting into treated areas the risk of crop injury is less if lower rates of product were applied and conditions following application have included warm moist soil conditions that favor rapid breakdown of 2 4 D Risk is greater if higher rates of product were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application Consult your local agricultural extension service or information about susceptible crops and typical conditions in your area

Sorghum (Grain Sorghum (Milo) and Forage Sorghum)

Application Timing/ Stage of Growth	Liberty 2,4-D Ester (pt/acre)	Specific Use Directions
Postemergence* Crop 6-8 inches tall Crop 8-15 inches tall (directed spray only)	1/2 to 1* 3/4 to 1	Apply when sorghum is 6 to 15 inches tall If Sorghum more than 8 inches tall (top of canopy) Use drop nozzles to keep spray off foliage Do not use with oil or other adjuvants Do not treat during boot, flowering or dough stage

*Temporary crop injury can be expected under conditions of high soil moisture and high soil temperatures If it is necessary to apply Liberty 2 4-D Ester 4 under these conditions use no more than 2/3 pt per acre

Precautions and Restrictions

- Sorghum hybrids vary in tolerance to 2 4-D Some are easily injured Apply only to varieties known to be tolerant to 2 4-D Consult the seed company or your agricultural experiment station or extension service weed specialist for this information
- Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days after application
- Do not apply more than 1 0 pt/acre of Liberty 2 4-D Ester 4 per use season
- Pre-harvest Interval (PHI) Do not harvest grain or forage within 30 days after application

19/24

Soybeans (Preplant Burndown Application Only) (Not for Use in California)

Application Timing	Liberty 2,4-D Ester 4 (pt/acre)	Specific Use Directions
Preplant (Burndown)	3/4 to 1	Apply not less than 7 days before planting soybeans See Use Precautions and Restrictions below
	1 to 2	Apply not less than 15 days before planting soybeans See Use Precautions and Restrictions below

Use Directions Use Liberty 2 4-D Ester 4 to control emerged broadleaf weeds or existing cover crops For best results apply when weeds are small and actively growing Use the higher rate in the respective rate range for larger weeds and when perennials are present Compatible crop oil concentrates agricultural surfactants and fluid fertilizers approved for use on growing crops may be added to spray mixtures to increase the herbicidal effectiveness on certain weeds Read and follow all directions and precautions on this label and on the label of each product added to the spray mixture

Use Precautions, Restrictions and Limitations

- **Important Notice** Unacceptable injury to soybeans planted in treated fields may occur Whether or not soybean injury occurs and the extent of such injury will depend on weather (temperature and rainfall) from herbicide application until soybean emergence and agronomic factors such as the amount of weed vegetation and previous crop residue present at the time of application Injury is more likely under cool rainy conditions and where there is less weed vegetation and crop residue present
- Do not disturb treated soil through tillage between application and planting of soybeans
- Do not use on sandy soils with less than 1 0% organic matter
- In treated fields plant soybean seed as deep as practical but not less than 1 0 inch deep Adjust the planter if necessary to ensure that planted seed is adequately covered
- Do not make more than one application per season regardless of the application rate used
- Do not allow livestock grazing or harvest hay forage or fodder from treated fields Livestock should be restricted from feeding/grazing of treated cover crops
- **Do not apply Liberty 2,4-D Ester 4 as a preplant application in soybeans unless you are prepared to accept the results of soybean injury including possible stand loss and/or yield reduction**
- During the growing season following application do not replant treated fields with crops other than those labeled for use with Liberty 2 4 D Ester 4
- Do not apply more than 2 pt/acre of Liberty 2 4-D Ester 4 per use season

Forestry, Rangeland, Established Pasture, and Non-cropland Uses

Agricultural Use Requirements for Rangeland, Pasture, Forest (Tree Injection Only) and Non cropland Areas When this product is applied to rangeland and established pastures not harvested for hay or seed non-cropland areas and when applied by tree injection method only in forest sites follow reentry requirements given in the Non-Agricultural Use Requirements section of this label

Agricultural Use Requirements for Forests (Except Tree Injection Use) For use in forests follow PPE and Reentry instructions in the Agricultural Use Requirements section of this label

Forests - Forest site preparation, forest roadsides, brush control, established conifer release (including Christmas trees and reforestation areas)

Treatment Site Method of Application	Liberty 2,4-D Ester 4	Specific Use Directions
Annual Weeds	2 to 4 pt/acre	Apply when weeds are small and growing actively before the bud stage Apply when biennial and perennial species are in the seedling to rosette stage and before flower stalks appear
Biennial and perennial broadleaf weeds and susceptible woody plants	4 to 8 pt/acre	For difficult to control perennial broadleaf weeds and woody species use up to 4 qt of Liberty 2 4-D Ester 4 plus 1 to 4 qt of Garlon 3A herbicide per acre For conifer release make application in early spring before budbreak of conifers when weeds are small and actively growing

<p>Spot Treatment to control broadleaf weeds</p>	<p>See Instructions for Spot Treatment</p>	<p>Note To control broadleaf weeds in small areas with a hand sprayer use an application rate equivalent to the broadcast rate specified for this treatment site and spray to thoroughly wet all foliage See rate conversion table and instructions for Spot Treatment and use of hand-held sprayers under Application Instructions</p>
<p>Conifer Release Species such as white pine ponderosa pine jack pine red pine black spruce white spruce red spruce and balsam fir</p>	<p>1 1/2 to 3 qt/acre</p>	<p>To control competing hardwood species such as alder aspen birch hazel and willow apply from mid to late summer when growth of conifer trees has hardened off and woody plants are still actively growing Apply with ground or air equipment using sufficient spray volume to ensure complete plant Because this treatment may cause occasional conifer injury do not apply if such injury cannot be tolerated</p>
<p>Directed Spray Conifer plantations including pine</p>	<p>4 qt/100gal</p>	<p>Apply when brush or weeds are actively growing by directing the spray so as to avoid contact with conifer foliage and injurious amounts of spray Apply in oil oil-water or water carrier in a spray volume of 10 to 100 gallons per acre</p>
<p>Basal Spray (May also be used in Rangeland Pastures and Noncropland)</p>	<p>8qt/100 gal or</p>	<p>Thoroughly wet the base and root collar of all stems until the spray begins to accumulate around the root collar at the ground line Wetting stems also with the mixture may aid in control</p>
<p>Surface of Cut Stumps (May also be used in Rangeland, Pastures, and Noncropland)</p>	<p>2 6 fl oz/gal of water</p>	<p>Apply as soon as possible after cutting trees Thoroughly wet the cambium layer of the cut surface being careful to wet the entire circumference</p>
<p>Frill and Girdle (May also be used in Rangeland, Pastures, and Noncropland)</p>		<p>Cut frills (overlapping V-shaped notches cut downward through the bark in a continuous ring around the base of the tree) using an axe or other suitable tool Saturate the freshly cut frills with the 2 4-D mixture</p>
<p>Tree Injection Application (May also be used in Rangeland, Pastures, and Noncropland)</p>	<p>(1 to 2 ml per injection site)</p>	<p>To control and prevent resprouting of unwanted hardwood trees such as elm hickory oak and sweetgum in forests and other non-crop areas apply by injecting at a rate of 1 ml of undiluted Liberty 2 4-D Ester 4 per inch of trunk diameter as measured at breast height (DBH) approximately 4 1/2 ft above the ground Injection sites however should be as close to the root collar as possible and the injection bit must penetrate the inner bark Applications may be made throughout the year but for best results apply between May 15 and October 15 Maples should not be treated during the spring sap flow For hard to control species such as ash maple and dogwood use 2 ml of undiluted Liberty 2 4-D Ester 4 per injection site or double the number of 1 ml injections Note No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants</p>

Precautions and Restrictions

- Do not allow sprays to contact conifer shoot growth (current year's new growth) or injury may occur
- Do not apply to nursery seedbeds
- For conifer release do not use on plantations where larch is among the desired species
- **Grazing and Haying Restrictions** If grazing or haying is anticipated do not apply more than 4 pt/acre of Liberty 2 4 D Ester 4 per application Do not harvest forage or hay from treated areas for 7 days after application If treated area is grazed within 30 days of application withdraw meat animals at least 3 days before slaughter
- For broadcast applications do not apply more than 8 0 pt/acre of Liberty 2 4-D Ester 4 per 12 month period
- Limited to 1 broadcast application per year
- Limited to 1 basal spray or cut surface application per year
- Limited to 1 injections application per year

21/24

Rangeland, Established Grass Pastures (including Perennial Grasslands not in Agricultural Production such as Conservation Reserve Program Acres)

Target Weeds or Woody Plants	Liberty 2,4-D Ester 4 (pt/acre)	Specific Use Directions
Annual broadleaf weeds Biennial and perennial broadleaf weeds	2 2 to 4	For best results apply when weeds are small and growing actively before the bud stage Apply when musk thistles or other biennial species are in the seedling to rosette stage and before flower stalks appear Refer to the Weeds Controlled section for a listing of susceptible weed species and weeds that may be only partially controlled and require repeat applications and/or use of higher specified rates even under ideal conditions of application
Spot Treatment to control broadleaf weeds	See Instructions for Spot Treatment	Note To control broadleaf weeds in small areas with a hand sprayer use an application rate equivalent to the broadcast rates specified for this treatment site and spray to thoroughly wet all foliage See rate conversion table and instructions for Spot Treatment and use of hand-held sprayers under Application Instructions
Basal spray, cut surface, frill and girdle, and tree injection application methods		Refer to the Forestry Uses section for specific use instructions for these application methods
Wild garlic and wild onion	4	Make three applications (fall-spring-fall or spring-fall-spring) starting in late fall or early spring
Broadleaf weed control in newly sprigged coastal bermudagrass	2 to 4	Applications may be made either preemergence of postemergence Follow Specific Use Directions for Rangeland and Established Grass Pastures above
Sand shinnery oak Sand sagebrush	2	Sand shinnery oak Apply by aircraft between May 15 and June 15 Sand sagebrush Apply by ground or aircraft when foliage is fully expanded and plants are actively growing Use a 1 4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre
Big sagebrush Rabbitbrush	4	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing Use a 1 4 oil-water emulsion as carrier and a spray volume of 3 to 5 gallons per acre Retreatment may be needed
Chamise, Manzanita, buckbrush, coastal sage, coyotebrush, and chaparral species	4	Apply by ground or aircraft when foliage is fully expanded and plants are actively growing Use water or 1 4 oil-water emulsion as carrier and a spray volume of 5 to 10 gallons per acre Retreatment may be needed
Southern wild rose Broadcast application Spot treatment	Up to 4 1 gal/100 gal of spray	Broadcast Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment Spot treatment Apply when foliage is well developed Thorough coverage is required Use 1 gallon of Liberty 2 4-D Ester 4 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water Two or more treatments may be required Do not exceed 4 pt per acre per application
CRP Acres		For program lands such as CRP consult program rules to determine whether grass or hay may be used The more restrictive requirements of the program rules or this label must be followed

Precautions and Restrictions

- Do not use on bentgrass alfalfa clover or other legumes
- Do not use on newly seeded areas until grass is well established
- Do not use from early boot to milk stage where grass seed production is desired

- Do not apply within 30 days of a previous application
- **Grazing and Haying Restrictions** In grazed areas do not apply more than 4 pt/acre of Liberty 2 4-D Ester 4 per application Do not harvest forage or hay from treated areas for 7 days after application If treated area is grazed within 30 days of application withdraw meat animals at least 3 days before slaughter
- Do not apply more than 8 pt/acre of Liberty 2 4-D Ester 4 per use season
- Limited to 2 applications per year
- Maximum of 2 0 lbs ae 2 4 D per acre per application

Non-cropland - Including fencerows, hedgerows, roadsides, rights-of-way, utility power lines, railroads, airports and industrial sites

Treatment Site or Method of Application	Liberty 2,4-D Ester 4 (pt/acre)	Specific Use Directions
Annual, Biennial and Perennial broadleaf weeds Susceptible woody plants	2 to 4 4 to 8	Apply when annual weeds are small and growing actively before the bud stage Biennial and perennial weeds should be rosette to bud stage but not flowering at the time of application For difficult to control woody species tank mix up to 4 quarts of Liberty 2 4-D Ester 4 plus 1 to 4 qt of Garlon 3A per acre Oil or wetting agent may be added to the spray if needed for increased effectiveness For ground application (High volume) apply a total spray volume of 100 to 400 gallons per acre (low volume) apply a total spray volume of 10 to 100 gallons per acre For helicopter Apply a total spray volume of 5 to 30 gallons per acre
Spot Treatment to control broadleaf weeds	See Instructions for Spot Treatment	Note To control broadleaf weeds in small areas with a hand sprayer use an application rate equivalent to the broadcast rates specified for this treatment site and spray to thoroughly wet all foliage See rate conversion table and instructions for Spot Treatment and use of hand-held sprayers under Application Instructions
Basal spray, cut surface, frill and girdle , and tree injection application methods		Refer to the Forestry Uses section for specific use instructions for these application methods
Southern wild rose Broadcast	up to 4	Broadcast Apply in a spray volume of 5 or more gallons per acre by aircraft or 10 or more gallons per acre by ground equipment Apply when foliage is well developed Thorough coverage is required Use 4 qt of Liberty 2 4-D Ester 4 plus 4 to 8 fluid ounces of an agricultural surfactant per 100 gallons of water Two or more treatments may be required
Spot treatment	1 gal/100 gal of spray	

Precautions and Restrictions

- Do not apply to newly seeded areas until grass is well established
- Bentgrass St Augustine clover legumes and dichondra may be severely injured or killed by this treatment
- Do not reapply to a treated area within 30 days of a previous application
- **Grazing and Haying Restrictions** If grazing or haying is anticipated do not apply more than 4 pt/acre of Liberty 2 4-D Ester 4 per application Do not harvest forage or hay from treated areas for 7 days after application If treated area is grazed within 30 days of application withdraw meat animals at least 3 days before slaughter
- Do not apply more than 8 0 pt/acre of Liberty 2 4-D Ester 4 per use season

Postemergence (annual and perennial weeds)

- Limited to 2 applications per year
- Maximum of 2 0 lbs ae 2 4-D per acre per application

- Minimum of 30 days between applications
- Postemergence (woody plants)**
- Limited to 1 application per year
 - Maximum of 4.0 lbs ae 2,4-D per acre per year

Applications to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use or for commercial seed production or for research purposes.

Turf Uses - Grasses Grown for Seed or Sod

Agricultural Use Requirements When used in grass grown for seed or sod farms follow PPE and reentry instructions in the Agricultural Use Requirements section of this label

Treatment Site (Application Timing)	Liberty 2,4-D Ester 4 (pt/acre)	Specific Use Directions
Grasses Grown for Seed (Postemergence Use) Seedling grass (five leaf stage or later) Well established grasses	3/4 to 1 1 to 4	Apply when weeds are small and actively growing For best results apply when soil moisture is adequate for active weed growth Do not apply to newly seeded grasses until well established (five-leaf stage or later) and then use a maximum of 1 pt/acre Cool season grasses are more tolerant to higher rates Do not apply to grass in the early boot through milk stage if seed production is desired When grass is well established higher rates of up to 4 pints/acre may be applied for control of hard-to-kill annual or perennial weeds
Sod Farms (Postemergence)	2 to 4	Deep-rooted perennials such as bindweed and Canada thistle may require repeat applications Avoid mowing sod farms for 1 to 2 days before or after application Delay irrigation until the day following application

Precautions and Restrictions

- Do not use on creeping grasses such as bentgrass except for spot treatment
- Do not use on susceptible southern grasses such as St. Augustine grass
- Do not use on dichondra or other herbaceous ground covers legumes may be damaged or killed
- **Reseeding** Delay reseeding at least 30 days following application Preferably with spring application reseed in the fall and with fall application reseed in the spring
- **Grazing and Haying Restrictions** If grazing or haying is anticipated do not apply more than 4 pt/acre of Liberty 2,4-D Ester 4 per application Do not harvest grass for hay from treated areas for 7 days after application If treated area is grazed within 30 days of application withdraw meat animals at least 3 days before slaughter
- Do not apply more than 8 pt/acre of Liberty 2,4-D Ester 4 per use season
- Limited to 2 applications per year
- Maximum of 2.0 lbs ae 2,4-D per acre per year
- Minimum of 21 days between applications

Ornamental Turf (Excluding Grasses Grown for Seed or Sod Farms) (includes lawns, golf courses, cemeteries and parks, airfields, roadsides and vacant lots)

Use Requirements for Ornamental Turf Areas When this product is applied to ornamental turf areas follow PPE and reentry instructions in the Non-agricultural Use Requirements section of this label

Treatment Site (Application Timing)	Liberty 2,4-D Ester 4 (pt/acre)	Specific Use Directions
Ornamental Turf (Postemergence) Seedling grass (five-leaf stage or later)	3/4 to 1	Apply when weeds are small and actively growing For best results apply when soil moisture is adequate for active weed growth Deep-rooted perennial weeds such as bindweed and Canada thistle may require repeat applications Do not

Well-established grasses	2 to 3	apply to newly seeded grasses until well established (five-leaf stage or later) and then use a maximum of 1 pt/acre Cool season grasses are tolerant of higher rates
Biennial and perennial Broadleaf weeds	3	

Precautions, Restrictions

- Do not use on creeping grasses such as bentgrass except for spot treatment
- Do not use on susceptible southern grasses such as St Augustine grass
- Do not use on dichondra or other herbaceous ground covers legumes may be damaged or killed
- **Reseeding** Delay reseeding at least 30 days following application Preferably with spring application
- reseed in the fall and with fall application reseed in the spring
- Do not make more than 2 broadcast applications per treatment site per year (does not include spot treatments)
- Do not apply more than 3 pt/acre of Liberty 2 4-D Ester 4 per acre

CONDITION OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product If the terms are not acceptable return the product at once unopened and the purchase price will be refunded

The Directions for Use of this product must be followed carefully It is impossible to eliminate all risks inherently associated with the use of this product Ineffectiveness or other unintended consequences may result because of such factors as manner of use or application weather presence of other materials or other influencing factors in the use of the product which are beyond the control of LIBERTY CROP PROTECTION LLC or Seller To the extent consistent with applicable law all such risks shall be assumed by Buyer and User and Buyer and User agree to hold LIBERTY CROP PROTECTION LLC and Seller harmless for any claims relating to such factors

LIBERTY CROP PROTECTION LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use subject to the inherent risks referred to above when used in accordance with directions under normal use conditions This warranty does not extend to the use of this product contrary to label instructions or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller or LIBERTY CROP PROTECTION LLC and Buyer and User assume the risk of any such use TO THE EXTENT CONSISTENT WITH APPLICABLE LAW LIBERTY CROP PROTECTION LLC MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE

To the extent consistent with applicable law neither LIBERTY CROP PROTECTION LLC nor Seller shall be liable for any incidental consequential or special damages resulting from the use or handling of this product **TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE EXCLUSIVE REMEDY OF THE USER OR BUYER AND THE EXCLUSIVE LIABILITY OF LIBERTY CROP PROTECTION LLC AND SELLER FOR ANY AND ALL CLAIMS LOSSES INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY CONTRACT NEGLIGENCE TORT STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR AT THE ELECTION OF LIBERTY CROP PROTECTION LLC OR SELLER THE REPLACEMENT OF THE PRODUCT**

LIBERTY CROP PROTECTION LLC and Seller offer this product and Buyer and User accept it subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability which may not be modified except by written agreement signed by a duly authorized representative of LIBERTY CROP PROTECTION LLC

