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Approved for the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 1990-499

# WEED-OUT LO-VOL ESTER 6

**ACTIVE INGREDIENT:**

Isooctyl Ester of 2,4-Dichlorophenoxyacetic acid .....	89.3%
INERT INGREDIENTS .....	10.7%
TOTAL .....	100.0%

\*(Equivalent to 59.2% 2,4-Dichlorophenoxyacetic acid) This Product Contains 5.66 Pounds of 2,4-Dichlorophenoxyacetic Acid Per Gallon. Isomer Specific by AOAC Method No. 6.D01-5.

## A Selective Herbicide

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

**NOT FOR SALE TO OR USE BY HOMEOWNERS.**

See Side Panel for Additional Precautionary Statements.

NET CONTENTS \_\_\_\_\_ GALLONS

MANUFACTURED BY  
**FARMLAND INDUSTRIES, INC.**



### PRECAUTIONARY STATEMENTS

#### Statement of Practical Treatment

**IF SWALLOWED:** Call a Physician or Poison Control Center. Drink 1 to 2 glasses of water and induce vomiting by touching back of throat with finger, or, if available, by administering SYRUP OF IPECAC. Do not induce vomiting or give anything by mouth to an unconscious person.

**ON SKIN:** In case of contact with skin wash with soap and water. Get medical attention if irritation persists.

**IN EYES:** For eyes flush with water for 15 minutes and get medical attention.

#### Hazards to Humans and Domestic Animals

##### CAUTION

**Keep out of reach of children.**

Hamful if swallowed. Avoid contact with skin, eyes or clothing. Avoid breathing spray mist. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not wear contaminated shoes.

#### Environmental Hazards

This product is toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from target area.

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## DIRECTIONS FOR USE

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

### STORAGE AND DISPOSAL

#### Storage

Do not contaminate water, food, feed, seeds, fertilizer, insecticides or fungicides by transportation, storage, disposal or cleaning of equipment.

Do not store near other pesticides, fertilizers or seeds. This product can be stored in an unheated building. However, Lo-Vol Ester 6 herbicide exposed to subfreezing temperatures should be warmed to at least 40 degrees F. and mixed thoroughly before using.

#### Disposal

**Containers:** Triple rinse (or equivalent) and offer for recycling or reconditioning, or disposal in a sanitary landfill, or by other approved State and local procedures. DO NOT REUSE EMPTY CONTAINERS.

**Pesticide:** Pesticide, spray mixture or rinsate, that cannot be used according to label instructions, must be disposed of according to FEDERAL, STATE OR LOCAL procedures under the RESOURCE CONSERVATION AND RECOVERY ACT. Open dumping is prohibited.

### CONDITIONS OF SALE AND WARRANTY

#### Conditions of Sale

This product is sold subject to and buyer and users are deemed to have accepted the terms contained in the CONDITIONS OF SALE AND WARRANTY, DIRECTIONS FOR USE and PRECAUTIONARY STATEMENTS, which may be varied only by agreement in writing signed by a duly authorized representative of FARMLAND INDUSTRIES, INC.

#### Inherent Risks

The directions for use of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of FARMLAND INDUSTRIES, INC., or the seller. All such risks shall be assumed by the buyer.

#### Warranty Limitation

Farmland Industries warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the DIRECTIONS FOR USE, subject to the inherent risks referred to above. FARMLAND MAKES NO OTHER EXPRESSED OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

#### Limitation of Liability

In no case shall Farmland or the seller be liable for consequential, special or indirect damages resulting from the use or handling of this product. No claim of any kind shall be greater in amount than the purchase price of the product in respect of which such damages are claimed.

## WEED LIST

Use LO-VOL ESTER 6 herbicide to control many broadleaf weeds including:

### Annual and Biennial Weeds

Beggarticks	Jewelweed	Radish (wild)
Bitterweed	Jimsonweed	Ragweed (common)
Broomweed	Kochia	Russian thistle
Bull thistle	Knotweed	Shepherd's purse
Burdock	Lambsquarters	Smartweed
Carpetweed	Lettuce (wild)	Sneezeweed
Cinquefoil	Mallow	Sowthistle (common)
Cockle	Marshelder	Spanish needles
Cocklebur	Marijuana	Sunflower
Coffeeweed	Morningglory (annual)	Tumbleweed
Croton	Mustard	Velvet leaf
Devil's claw	Parsnip	Vervains
Fleabane (daisy)	Pennycress	Vetch
Flixweed	Peppergrass	Wild carrot
Frenchweed	Pigweed	Witchweed
Galinsoga	Prickly lettuce	Wormwood
Goatsbeard	Primrose	Yellow starthistle
Goosefoot	Puncturevine	

### Perennial Weeds

Artichoke	Goldenrod	Rushes
Aster	Ground ivy	Sowthistle
Austrian field cress	Gumweed	Stinging nettles
Bindweed	Healall	Strawberry (wild)
Blackeyed susan	Hoary cress	Tall buttercup
Blue lettuce	Horsetail	Tan weed
Bull thistle	Ironweed	Toad flax
Canada thistle	Loco weed	Vervains
Catnip	Musk thistle	Yellow rocket
Chicory	Nettles	Wild garlic
Clover (many types)	Orange hawkweed	Wild onion
Dandelion	Plantains	Wild parsnip
Docks	Poverty weed	Wild sweet potato
Dogbane	Ragweed	

### Also Certain 2,4-D Susceptible Woody Plants Such As:

Big sagebrush	Hazel	Sand sagebrush
Buckbrush	Locust	Sand shinnery oak
Chamise	Manzanita	Sumac
Coastal sage	Poison oak	Tule (bulrush)
Elderberry	Rabbit brush	Willow

### GENERAL USE PRECAUTIONS

Do not apply Lo-Vol Ester 6 herbicide directly to, or in the vicinity of or otherwise permit it to come into contact with cotton, soybeans, grapes, fruit trees, vegetables, flowers or other desirable crops or ornamental plants which are sensitive to 2,4-D herbicide. Do not permit spray mist containing it to drift onto them, since even very small quantities of the spray, which may not be visible, can cause severe injury during both growing and dormant periods. Use coarse sprays to minimize drift.

### GROUND EQUIPMENT

With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by applying 20 gallons or more of spray per acre; by

using no more than 20 pounds spraying pressure with flat fan or flooding flat fan nozzle tips; by spraying when wind velocity is low; and by stopping all spraying when wind exceeds 6 to 7 miles per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine droplet spray.

#### AIRCRAFT APPLICATION

With aircraft application, drift can be lessened by applying no less than 3 to 5 gallons of spray per acre; by using no more than 20 pounds spray pressure at the nozzles; by using nozzles which produce a coarse spray pattern; and by spraying only when the wind velocity is less than 5 miles per hour. Do not apply by aircraft when an air temperature inversion exists.

Applications by aircraft, ground rig and hand dispenser should be carried out only when there is no hazard from spray drift. A spray thickening agent may be used with this product to reduce spray drift. Do not spray when the wind is blowing toward susceptible crops or ornamental plants.

Drift from this product may injure susceptible plants growing nearby. Do not use in or near a greenhouse. Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination or plant growth. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.

To avoid injury to desirable plants, do not handle or apply other agricultural chemicals with the same equipment used for Lo-Vol Ester 6 except as specified on this label. Do not store near fertilizers, seeds, insecticides or fungicides.

Local conditions may affect the use of herbicides. Consult your State Agricultural Experiment Station or Extension Service weed specialists for advice in selecting treatments from this label to best fit local conditions. Be sure that use of this product conforms to all applicable regulations. Apply this product only as specified on this label.

#### USE DIRECTIONS

Apply Lo-Vol Ester 6 as water or oil spray during warm weather when weeds or brush are actively growing. Application under drought conditions often will give poor results. Use low spray pressure to minimize spray drift. On cropland and along roadsides, do not exceed 20 psi pressure. Apply enough spray volume to provide uniform coverage of weeds, usually 5 to 20 gallons per acre by ground equipment and 3 to 5 gallons per acre by aircraft. Higher gallonage may be used if desired to improve spray coverage and reduce spray drift. Generally, the lower dosages recommended on this label will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosages will be needed. **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 maximum control. Do not apply Lo-Vol Ester 6 where spray drift may contact nearby susceptible crops or other desirable plants or may contaminate water for irrigation or domestic use. Do not apply in the vicinity of 2,4-D sensitive crops or ornamental plants since vapors from this product may cause injury to such crops or plants. This is a low-volatile 2,4-D ester formulation. Read and follow all Use Precautions given on this label.

NOTE: If there are uncertainties concerning special local use situations, specific crop variety tolerances to 2,4-D, or the use of raindrop nozzles or controlled droplet applicators, consult your Agricultural Experimental Station or Extension Weed Specialist for advice.

#### TO PREPARE THE SPRAY:

- (1) Fill the spray tank about half full with water, then add the required amount of Lo-Vol Ester 6 with agitation, and finally the rest of the water. Note: Lo-Vol Ester 6 in water forms an emulsion which tends to separate unless the mixture is kept agitated.
- (2) If oil is added, first mix the Lo-Vol Ester 6 and the oil and then add this mixture to the water with agitation. However, with adequate agitation, the oil can be added after the Lo-Vol Ester 6 is mixed in the water.
- (3) If oil alone is used as the carrier, 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.

#### USE IN LIQUID NITROGEN FERTILIZER

Lo-Vol Ester 6 may be combined with liquid nitrogen (nonpressure) fertilizer suitable for foliar application to accomplish weeding and feeding of corn, small grains or grass pastures in one operation. Use Lo-Vol Ester 6 in accordance with recommendations for these crops as given on this label. Use liquid fertilizer at rates recommended by supplier or State Extension Service personnel. Fill the spray tank about half full with the liquid fertilizer, then add the Lo-Vol Ester 6 with agitation and complete filling the tank with fertilizer. Apply immediately and continue agitation in the spray tank during application. Application during very cold weather (near freezing) is not advisable. Do not store the spray mixture.

#### RECOMMENDATIONS FOR USE IN CROPS

Woods & Crops	Amount Per Acre	Directions
Corn (pre-emergent)	1 1/2 to 2 1/2 pts.	Spray after planting before corn emerges, preferably 2 to 5 days after planting. Do not apply to sandy soils.
Corn (emergence)	2/3 pt.	Apply just as corn plants are breaking ground.
Corn (post-emergent)	1/3 pt.	Spray when weeds are small and crop is 4 to 12 inches tall. Use drop nozzles when corn is more than 8 inches tall or beyond the 5-leaf stage to keep the spray off the corn foliage. Application of 1/2 to 2/3 pt. per acre may be needed to control resistant weeds but crop injury is more likely.
	1/2 to 2/3 pt.	
Corn (preharvest)	2/3 to 1 1/2 pts.	Apply after the hard dough or denting stage by air or ground equipment to suppress perennial weeds, decrease seed production and control tall weeds such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower, velvet leaf and vines that interfere with harvesting. Do not forage or feed corn fodder for 7 days following application.
Grain sorghum (milo) post-emergent	1/3 pt.	Spray when weeds are small and crop is 4 to 12 inches tall. Use drop nozzles when sorghum is more than 8 inches tall. Do not spray before sorghum is 4 inches tall nor during boot, flowering or early dough stage.

Do not use with atrazine, oil or other adjuvants. Do not apply from the tasseling to dough stage in corn. Crop injury is more likely to occur if corn or sorghum is growing rapidly under high temperature and high soil moisture conditions; in such cases use the lower rate. To reduce breakage of stalks from temporary brittleness caused by 2,4-D, delay cultivation for 8 to 10 days after treatment.

NOTE: Hybrids vary in response to 2,4-D and some are easily injured. Spray only varieties known to be tolerant to 2,4-D. Contact seed company and Extension Service Weed Specialists for this information.

### SMALL GRAINS NOT UNDERSEEDED WITH A LEGUME

Weeds & Crops	Amount Per Acre	Directions
Wheat, Oats, Barley, Rye (fall seeded)	1/3 to 1/2 pt.  2/3 to 1 1/3 pts.	Apply after full tiller but before boot stage. Do not treat in fall. Do not apply from boot to milk stage or in seedling stage. Do not forage or graze treated grain fields within 2 weeks after treatment with 2,4-D. Do not feed treated straw to livestock. For wild onion and wild garlic. These rates may injure the crop.
Wheat, Barley, Rye (spring seeded)	1/3 to 2/3 pt.	Apply after full tiller (usually 4 to 8 inches) but before boot stage. Do not apply from boot to milk stage. Do not forage or graze treated grain fields within 2 weeks after treatment with 2,4-D. Do not feed treated straw to livestock.
Oats (spring seeded)	1/3 to 1/2 pt.	Apply at the full tiller stage but before the early boot stage. Do not apply from boot to milk stage. Do not forage or graze treated grain fields within 2 weeks after treatment with 2,4-D. Do not feed treated straw to livestock. Oats are less tolerant to 2,4-D than wheat or barley.
Wheat, Oats, Barley, Rye (preharvest)	2/3 to 1 1/3 pts.	Apply when grains are in the hard dough stage to control large weeds that may interfere with harvest. Best results are obtained when weeds are growing vigorously. Do not feed treated straw to livestock.
Oats for Grain Southern U.S. (fall seeded)	1/2 to 1 pt.	Apply after full tillering but before the early boot stage. Do not spray during or immediately following cold weather. Do not forage or graze treated grain fields within 2 weeks after treatment with 2,4-D. Do not feed treated straw to livestock.
Grain stubble for wild garlic	1 1/3 to 2 qts.	Apply following harvest as wild garlic often produces new growth. Do not forage for 7 days following application. Do not plant to any crop until 3 months after treatment or until chemical has disappeared from soil.

Water is recommended to make up the spray. The use of the higher rates in special situations to handle difficult weed problems is more likely to cause crop injury. Oats are less tolerant of 2,4-D and more susceptible to injury. Do not feed treated straw to livestock. When using high rates in special situations consult your state weed specialist for recommendations to fit local conditions.

### RANGELAND AND GRASS PASTURES

Weeds	Amount Per Acre	Directions
Weeds and brush	2/3 to 1 1/3 qts.	Apply when weeds are small and actively growing. Spray perennials when in the bud stage. The lower rate can be used for susceptible species.

Legumes such as clover or alfalfa may be damaged. Do not graze to dairy animals within 7 days after treatment. Do not apply to newly seeded areas or after heading begins. Do not apply to grass when in boot to milk stage. Do not apply to bent or susceptible grass pastures.

Weeds & Crops	Amount Per Acre	Directions
Newly sprigged coastal bermudagrass	2/3 to 1 1/3 qts.	Spray pre-emergence and/or post-emergence.
Special broadleaf weeds such as bitterwood, broomweed, croton, docks, kochia, marshelder	1 to 1 1/3 qts.	Use adequate water to provide uniform application.
Musk thistle	1 qt.  1 1/2 qts.	In spring in rosette stage before stalk lengthens and plants have bolted. In spring after bolting or in late fall or winter.
Wild garlic, Wild onion	1 1/2 to 2 qts.	Make 3 applications (fall-spring-fall or spring-fall-spring) starting in late fall or early spring. Do not forage for 7 days following application.

If weeds are young and growing actively, 2/3 quart per acre will provide control of some species. Deep-rooted perennial weeds may require repeated treatments in the same year or in subsequent years.

Chapparel Species	Amount Per Acre	Directions
Chamiso, Manzanita, Duckbrush, Coastal sage and others	1 1/2 to 2 qts.	Use 8 to 10 gallons spray solution per acre. One gallon of oil may be added for increased effectiveness. The volume of water can be increased to give good coverage.

For effective control the brush must be fully leaved out and growing actively when sprayed. Retreatment may be necessary.

Brush	Amount Per Acre	Directions
Big Sagebrush, Rabbit brush	1½ to 2 qts.	Use in 2 to 3 gallons of oil or in 3 to 5 gallons of oil-water emulsion. Rabbit brush usually requires 2-qt. rate.
Sand shinnery oak	¾ qt. in 5 gals. oil or 4 gals. water plus 1 gal. oil	Apply by aircraft between May 15 and June 15.
Sand sagebrush	¾ qt. in 3 gals. oil	Apply by aircraft when foliage is fully expanded and the brush is actively growing.

For effective control the sagebrush should be in full foliage and growing actively when sprayed.

Crops	Amount Per Acre	Directions
Grass seed crops	¾ to 1 pt.	Use sufficient water to give uniform application by ground or air. (See General Use Precautions for volumes of water.) Apply to established stands in spring from the tiller to early boot stage.

Do not spray from early boot to milk stage. New spring seedings can be treated with the lower rate after the grasses have at least five leaves. Perennial weed regrowth can be treated in the fall. Do not use on bent grass unless injury can be tolerated. For best results spray when soil moisture is adequate.

### NONCROP AREAS

Site	Amount Per Acre	Directions
Fence rows, lawns, airfields, roadsides, vacant lots, drainage ditches	1 to 2 qts.	Use the amount of water needed for uniform application. (See General Use Precautions for volumes of water.) Usually 1½ qts. provide good weed control under average conditions.

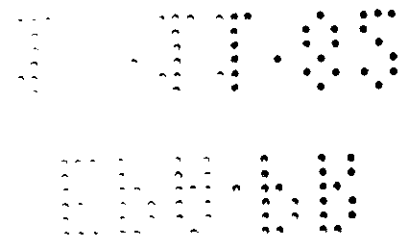
Treat when weeds are young and growing well. Do not use on golf greens nor on dichondra or other broadleaf herbaceous ground covers. Do not use on creeping grasses such as bent and St. Augustine except for spot treating, nor on newly seeded turf until grass is well established. Reseeding of treated areas should be delayed following treatment. With spring application, reseed in the fall; with fall application, reseed in the spring. Legumes are usually damaged or killed so do not treat areas where the legumes are desired. Deep-rooted perennial weeds may require repeated treatments in the same season or in subsequent years.

Site	Amount Per Acre	Directions
Woody plant control	2 to 2½ qts. per 100 gals. spray	Spray after spring foliage is well developed and up to 8 feet tall. Wet all parts of the brush including foliage, stems and bark. This may require up to 400 gals./acre for adequate cover of solid stands of brush.
Tule (bulrush) and other rushes	2½ pts. + 1 gal. diesel oil or kerosene in 100 gals. water	Spray to wet all foliage. Addition of a wetting agent may be useful. Apply in the spring during flower head emergence. Respray if needed when regrowth is 3 to 5 feet.

Make application in such a way as to prevent drift of the spray off the area being treated. Spraying can be effective at any time up to 3 weeks before frost as long as soil moisture is sufficient for active growth of the brush. Control will be less effective in mid-summer during hot dry weather when soil moisture is deficient and plants are not actively growing. Oil or wetting agent may be added to the spray, if needed for increased effectiveness.

Site	Amount Per Acre	Directions
Forest conifer release	1 to 2 qts. in 8 to 25 gals. water	After northern conifers such as jack pine, red pine, black spruce and white spruce harden off in late summer, the spray may be applied by air to control competing hardwood species such as alder, birch, aspen, etc. This treatment may cause occasional conifer injury. Consult your State Extension Forester for recommendations to fit local conditions.
Spot treatment in noncropland areas	¼ pt. per 3 gals. spray	Spray when weeds are small and thoroughly wet all foliage.

Keep spray mixture agitated to prevent separation. Do not spray onto or near or let the spray drift onto susceptible plants.



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