

2935-511

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

12-3-1996

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DEC 3 1996

Ms. Joanne Striebich  
Wilbur-Ellis Company  
191 W. Shaw Ave, Suite 107  
Fresno, CA 93704

Dear Ms. Striebich:

SUBJECT: Label Amendment To Improve Clarity of Use Directions;  
Add Tank Mixes; and Add New Use Sites, Including  
Grass Seed Crops, Soybeans, Brush Control, and  
Forest Management.

Lo Vol-4D

EPA Registration No. 2935-511

Your Resubmission Dated November 5, 1996

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable, provided you make the following changes:

1. Delete the redundant statements in the first paragraph under Hazards To Humans and Domestic Animals concerning open pouring of product in containers of over one and less than five gallons in capacity and mechanical transfer of product in containers over five gallons in capacity. These statements are appropriately included elsewhere on the label (under Personal Protective Equipment).

2. Correct the typographical error in the directions for use on Ornamental Turf. The statement which begins "On residential and other turf sites (excluding sod farms)... " should be a separate sentence.

3. The use of the subject product on soybeans (pre-plant only) is conditionally accepted with an expiration date of December 31, 1998. Sale or distribution of the subject product bearing labeling for this use after December 31, 1998 will be illegal. The tolerance authorizing residues of the subject product on soybeans will also expire on December 31, 1998. After that date, sale or distribution of food in interstate commerce containing any residue of the subject product will be a violation of the Federal Food, Drug, and Cosmetic Act. If and when a permanent tolerance is established, EPA will entertain an application to amend the registration of the subject product without any special limitations on the duration of the amendment.

RD:STANTON:PM Team 23:Rm. 235:CM-2:305-5218:Disk #4:S514970.LET

CONCURRENCES

SYMBOL ▶	7505C							
SURNAME ▶	S. Stanton							
DATE ▶	Dec 2, 1996							

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A stamped copy is enclosed for your records. Submit one copy of your final printed labeling before you release the product for shipment.

Sincerely yours,

Joanne I. Miller  
Product Manager (23)  
Fungicide-Herbicide Branch  
Registration Division (7505C)

Enclosure

# LO-VOL 4D

## A SELECTIVE LOW VOLATILE HERBICIDE

FOR CONTROL OR SUPPRESSION OF MANY BROADLEAF WEEDS AND BRUSH CONTROL IN CORN, SMALL GRAINS, SOYBEAN (PREPLANT ONLY) AND OTHER LISTED CROPS AND IN NON-CROP AREAS SUCH AS LAWNS, DRAINAGE DITCH BANKS, PASTURES, RANGELANDS, FENCE ROWS, RIGHTS-OF-WAY.

See Label for Tank Mixes in Both Crop and Non-Crop Areas

ACTIVE INGREDIENT:	
Isocyl Ester of 2,4-Dichlorophenoxyacetic Acid	66.8%
INERT INGREDIENTS: 33.2%	
TOTAL 100.0%	
Isomer Specific by ACAC PATENT	
2,4-Dichlorophenoxyacetic Acid	44.3%, 3.8 lbs./gal.

Contains Petroleum Distillates

EPA Reg. No. 2935-511

EPA Est. No. 42750-MO-1

### KEEP OUT OF REACH OF CHILDREN

## CAUTION - CAUCION

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.)

### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED:** Call a doctor or get medical attention. DO NOT induce vomiting, DO NOT give anything by mouth to an unconscious person. Avoid alcohol.

**IF ON SKIN:** Wash with plenty of soap and water. Get medical attention.

**IF IN EYES:** Flush eyes with plenty of water. Call a physician if irritation persists.

**NOTE TO PHYSICIAN:** May pose as aspirator pneumonia hazard.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS

### CAUTION - CAUCION

Caution: Causes eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. If this container is over one gallon and less than five gallons, then persons engaged in open pouring of this product must also wear coveralls or a chemical-resistant apron. If this container is five gallons or more in capacity, then a mechanical system (probe and pump) must be used for transferring the contents of this container. If the contents of a nonrefillable pesticide container are emptied, the probe must be rinsed before removal.

### PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow instructions for category E on an EPA chemical resistance category selection chart. Applicators and other handlers must wear: long-sleeved shirt and long pants; chemical-resistant gloves such as Barrier Laminar, Nitrile Rubber, Neoprene Rubber and Viton; shoes plus socks; and protective eye wear. Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, 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 control statements: If this container is over one gallon and less than five gallons, mixers and loaders who do not use a chemical system (probe and pump) to transfer contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE. If this container is five gallons or more in capacity, a mechanical system (probe and pump) must be used for transferring the contents of this container. If the contents of a nonrefillable 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) (4-6)], 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 Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

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

### ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and nontarget plants. For terrestrial uses, do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment wash waters. Do not apply this product through any type of irrigation system. Do not contaminate water used for irrigation or domestic purposes. Use care to avoid spray contact or drift to 2,4-D susceptible plants such as cotton, tomatoes, flowers, okra, grapes, fruit trees and ornamentals or other susceptible crops, or severe damage may result. Do not permit spray mist containing this product to drift onto them. Excessive amounts of this product in soil may temporarily inhibit seed germination and plant growth. Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement

### Environmental Hazards Continued:

and an increase in air temperature with an increase in height. In humid regions, a fog or mist may form. An inversion may be detected by producing a smoke column and checking for a layering effect. If questions exist pertaining to the existence of an inversion, consult with local weather services before making an application. Do not spray when the wind is blowing towards susceptible crops or ornamental plants. Use coarse sprays to minimize drift. Spray drift can be lessened by keeping the spray boom as low as possible, by spraying when wind velocity is low, by decreasing the pounds of pressure at the nozzle tips, and by stopping all spraying when wind is blowing toward susceptible plants. Do not use the same spray equipment for applying other materials to 2,4-D susceptible crops as injury may result. It is best to use a separate sprayer for application of insecticides and fungicides.

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. When using on (1) Pastures and Rangeland Grasses there is (a) 7 day pre-grazing interval for dairy cattle; (b) 30 day pre-harvest interval for grass cut for hay; and (c) 3 day pre-slaughter interval for meat animals. (2) Corn and small grains; Do not allow livestock to forage or graze treated fields within 14 days after treatment. Do not feed treated straw to livestock. (3) Sorghum; Do not allow livestock to graze treated areas within 14 days after treatment and (4) Grass Seed Crops; do not graze dairy animals within 7 days after treatment.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. READ ENTIRE LABEL BEFORE USING THIS PRODUCT. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

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 Laminar, Nitrile Rubber, Neoprene rubber and Viton; shoes plus socks; and protective eye wear. No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.

### NONAGRICULTURAL 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. Reentry statement for residential and other turf sites excluding sod farms: Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried.

**GENERAL INFORMATION**

This product is a low volatile ester especially prepared for use on crops and weeds where a susceptible crop in the near vicinity may be injured by a more volatile product. It is recommended for control of numerous broadleaf weeds and certain 2,4-D susceptible woody plants without injury to most established grasses. In cropland, 2,4-D esters are more effective than amines for controlling hard-to-control weeds such as Bindweed, Thistle, Smartweeds, Wild garlic, Curley dock, Tansy ragwort and Wild onions. For best results, apply this product as a water or oil spray during warm weather when young succulent weeds or brush are actively growing. Application under drought conditions often will give poor results. The lower recommended rates will be satisfactory on susceptible annual weeds. For perennial weeds and conditions such as the very dry areas of the Western states, where control is difficult, the higher recommended rates can be used, but some crop injury may occur. Deep-rooted perennial weeds such as Canada thistle, Field bindweed and many woody plants usually require repeated applications for maximum control.

Generally the lower dosages given will be satisfactory for young, succulent growth of sensitive weed species. To gain satisfactory weed control for less sensitive species and under conditions where control is more difficult, the higher dosages will be needed or the use of an approved tank mix combination. Apply Lo-Vol 4D during warm weather when weeds are young and growing actively. If band treatment is used, base the dosage rate on the actual area to be sprayed. Although water quantities may vary due to different types of application equipment, sufficient water must be used to provide for complete and uniform coverage. Higher water gallonage may be used if desired to improve spray coverage. In all cases, use the same recommended amount of 2,4-D per acre. When product is used for weed control in crops, the growth stage of the crop must be considered. For crop uses, do not mix with oil, or other adjuvants unless specifically recommended on label. To do so may reduce herbicide's selectivity and could result in crop damage. If you are not prepared to accept some degree of crop injury, do not use this product.

Unless otherwise specified make aerial applications in 1 to 10 gallons and ground applications in 5 to 25 gallons of spray volume per acre.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply this product to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant for advice.

Aerial Applications should be used only when there is no danger of drift to susceptible crops. Many states have regulations concerning aerial application of 2,4-D formulations. Consult local regulatory authorities before making applications. Although this product is a low volatile formulation, at temperatures above 90°F vapors may damage susceptible crops growing nearby. Read and follow all directions and precautions on this label and on the labels of any products for which a tank mixture is being considered. Wilbur-Ellis Company recommends the use of a drift retardant agent such as BIVERT® where physical drift is a concern.

**COMPATIBILITY:** If Lo-Vol 4D is to be tank mixed with fertilizers or with other pesticides, compatibility should be tested prior to mixing. To test for compatibility, use a small container and mix a small amount (0.5 to 1 qt.) of spray, combining all ingredients in the same ratio as the anticipated use. If any indications of physical incompatibility develop, do not use this mixture for spraying. If any indications of physical incompatibility develop, do not use this mixture for spraying. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing.

**TO PREPARE THE SPRAY:** (1) Fill the spray tank about half full with water. Then add the required amount of this product with agitation, and finally, the rest of the water. **NOTE:** This product in water forms an emulsion which tends to separate unless the mixture is kept agitated. Continue agitation during application until spray tank is empty. (2) If oil is added, first mix this product and the oil and then add this mixture to the water. However with adequate agitation the oil can be added after the product is mixed in 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.

Lo-Vol 4D will control or suppress the following weeds in addition to many other noxious plants susceptible to 2,4-D.

Alders, alfalfa, Alligator weed, American lotus, Arrowhead, Arichoke, Aster, A. fieldcorn, Beggarticks, Bident, Bindweed, Bitterweed, Bitter wintercress, Blackeye Susan, Blessed thistle, Blue lettuce, Box elder, Broomweed, Buckbrush, Buckhorn, Bull thistle, Burdock, Bur ragweed, Burdock, Burhead, Buttercup, Canada thistle, Carpetweed, Catnip, Chamise, Cherokee rose, Chickweed, Chicory, Cinquefoil, Coastal redstem sage, Cockle, Cocklebur, Coffee bean, Coffeeweed, Common sowthistle, Cornflower, Coyotebrush, Creeping jenny, Croton, Curly indigo, Dandelion, Devil's claw, Dock, Dogbane, Dogfennel, Duckweed, Elderberry, Fanweed, Fiddle neck, Fiea bane (Daisy), Flaxweed, Florida pusley, Frenchweed, Galinsoga, Goatsbeard, Goldenrod, Goosefoot, Ground ivy, Gumweed, Halogeton, Hawkweed, Healall, Hemp, Henbit, Hoary cress, Noneysuckle, Horsetail, Indiana mallow, indigo, Ironweed, Jerusalem artichoke, Jewelweed, Jimsonweed, Klamathweed, Knotweed, Lambsquarters, Locoweed, Lupines, Malow, Manzanita, Marijuana, Many flowered aster, Marshelder, Mexican weed, Milkvelch, Morningglory, Musk thistle, Mustards, Nettles, Nutgrass, Orange hawkweed, Parrotfeather, Parsnip, Pennycress, Pennywort, Peppergrass, Pepperweed, Pigweed, Plantain, Poison hemlock, Poison ivy, Pokeweed, Poorjoe, Povertyweed, Prickly lettuce, Primrose, Puncture vine, Purslane, Rabbitbrush, Ragweed, Redstem, Rush, Russian thistle, Sagebrush, Salsify, Sand shinnery oak, Shepherdspurse, Sicklepod, Smartweed, Sneezeweed, Southern wild rose, Sowthistle, Spanishneedles, Spatterdock, St. Johnswort, Starthistle, Stinging nettles, Stinkweed, Sumac, Sunflower, Sweet clover, Tansymustard, Tansy ragwort, Tanweed, Tarweed, Texas blueweed, Thistle, Toadflax, Tumbleweed, Velvetleaf, Vervain, Vetch, Virginia creeper, Water hemlock, Waterhyacinth, Water lily, water plantain, Water primrose, Water shield, Wild carrot, Wild garlic, Wild lettuce, Wild buckwheat, Wild onion, Wild radish, Wild rape, Wild strawberry, Wild sweet potato, Willow, Witchweed, Wormseed, Wormwood, Yellow rocket, yellow starthistle and other broadleaf weeds which may be listed elsewhere on this label.

Some of these species may require repeat applications and/or use of higher rate recommended on this label even under ideal conditions for applications. Control of pigweed in the high Plains area of Texas and Oklahoma may not be satisfactory with this product.

**USE IN LIQUID NITROGEN FERTILIZER:** This product may be combined with liquid nitrogen fertilizer suitable for foliage application on corn, grass, pastures or small grains in one operation. Use product according to directions on this label for those crops. Use liquid nitrogen fertilizer at rates recommended by supplier or Extension Service specialist. Mix the product and fertilizer according to the following instructions: Fill the spray tank approximately half full with the liquid nitrogen fertilizer. Add the product while agitating the tank. Add the remainder of the fertilizer while continuing to agitate. Apply immediately maintaining agitation during application until tank is empty. Do not apply during cold (near freezing) weather. Spray mixture must be used immediately and may not be stored. Do not allow mixture to stand overnight.

**NOTE:** If good continuous agitation is not maintained, separation of the spray mixture and/or clogging of the nozzles is likely to occur. Fertilizers can increase foliage contact burn of herbicides. Reducing the fertilizer rate and concentrate will reduce the hazard of leaf burn.

**ADJUVANT USE:** An agricultural surfactant, such as R-11® Spreader-Activator may be added at 0.25% by volume (1 qt. per 100 gallons of spray solution) to help increase the control of large or difficult weeds.

**EQUIPMENT CLEANUP:** Sprayers and equipment should be washed thoroughly after use. Neutral Clean™ tank cleaner will aid in cleaning equipment. Do not let wash waters accumulate on the ground. Pesticide residue must be captured and disposed of according to state, local and Federal regulations.

**SELECTIVE WEEDING IN CROPS**

**CORN (Field, Sweet and Popcorn):**

- Preplant - 1 to 2 pints
- Preemergent - Average Condition - 2 to 4 pints
- Emergent - 1 pint
- Post-emergent - Average Condition - ½ pint
- Dry Condition\* - ½ to ¾ pint

Pre-harvest - 1 to 2 pints

\* For Western states - Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming.

Use with recommended amounts of water to make per acre applications. Use lower rates of product for easily-controlled weeds, on inbreds and when corn is growing rapidly. Do not cultivate for about 2 weeks after treatment while corn is brittle.

**PREPLANT:** To control emerged broadleaf weed seedlings or existing cover crops prior to planting corn. Apply 7 to 14 days before planting. Do not use on light, sandy soil or where soil moisture is inadequate for normal weed growth. Use high rate for control of less susceptible weeds or cover crops such as alfalfa.

**PREEMERGENT:** Apply product to emerged weeds from 3 to 5 days after planting but before corn emerges. Do not use on very light, sandy soils. Use the higher rates on heavy soils. Plant corn as deep as practical. Product will not control weeds which have not emerged.

**EMERGENT:** Apply in 5 to 30 gallons of water per acre ground application, 1 to 5 gallons of water by air, just as corn plants are breaking ground.

**POST-EMERGENT:** Best results are usually obtained when weeds are small and corn is 4 to 18 inches tall. As soon as corn is over 8 inches tall, use drop nozzles to keep spray off corn foliage as much as possible; direct spray over tops of weed but not over the corn. Do not apply from tasseling to dough stage. If corn is growing rapidly and temperature and soil moisture is high, use ½ pint per acre to reduce possibility of crop damage. Delay cultivation for 8 to 10 days to prevent stalk breakage due to temporary brittleness caused by 2,4-D. Application rates of up to 1 pint per acre may be used to control some hard-to-control weeds. However, the possibility of injury to the corn is increased.

Do not use with atrazine, oil or other adjuvants. Since the tolerance to 2,4-D of individual hybrids varies, consult your seed supplier, local Extension Service, Agricultural Experiment Station or University Weed Specialist for information.

**PRE-HARVEST:** After the hard dough or denting stage, apply 1-2 pints in 1-5 gallons of water per acre by air or 5-30 gallons of water by ground equipment to suppress perennial weeds, decrease weed seed production and control tall weeds, such as Bindweed, Cocklebur, Dogbane, Jimsonweed, Ragweed, Sunflower, Velvetleaf and vines that interfere with harvesting. The high rate will be needed for tough weeds under stress.

**NO-TILL APPLICATION:** Lo-Vol 4D may be used in the broadcast method with a normal boom or with direct pipes set 12" apart in 36" rows. When using this product, apply at a rate of 13-½ oz. in 10 gallons of water per acre. Maintain uniform pressure and speed when applying.

**SMALL GRAINS (barley, oats, wheat, rye), not under-seeded with a legume:**

**Wheat, Barley, Rye:**

- Annual weeds - Average Condition - ¼ to 1 pint
- Dry Conditions\* - 1 to 2 pints
- Perennial Weeds - Average Condition - 1 pint
- Dry Conditions\* - 1-½ to 2 pints
- Pre-Harvest - Average Condition - 1 to 2 pints

\* For Western states - Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming.

For aerial application on grain, it is suggested to use this product in 1-5 gallons of water per acre and for ground application, use 3-25 gallons of water per acre.

Make application in the Spring when the grain is fully tillered or stooled (usually about 4 to 8 inches high), but before jointing. Do not spray before the tiller stage or from early boot to dough stage.

Use lower rate of product for easily-controlled seedling weeds, and higher rate for older and more tolerant weeds. Do not treat grains under-seeded with legumes, and do not spray Winter grains in the Fall. To control large weeds that will interfere with harvest or to suppress perennial weeds, pre-harvest treatment can be applied when grain is in the dough stage. Higher rates may be needed to handle difficult weed problems in certain areas such as under dry conditions especially in Western areas. However, do not use unless possible crop injury will be acceptable. For the high rates on Spring wheat and

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barley as well as Winter wheat and rye, consult State Agricultural Experiment Station or Extension Service weed specialists for recommendations or suggestions to fit local conditions.

**FOR EMERGENCY WEED CONTROL IN WHEAT:** Perennial broadleaf weeds - apply 3 pints per acre when weeds are approaching bud stage. Do not spray grain in the boot to dough stage. The 3 pint per acre application can produce injury to wheat. Balance the severity of your weed problem against the possibility of crop damage. Where perennial weeds are scattered, spot treatment is suggested to minimize the extent of crop injury. Use lower rate if small annual and biennial weeds are the major problem. Use the higher rate if perennial weeds or annual and biennial weeds are present which are in the hard-to-control categories as determined by local experience. The higher rates increase the risk of grain injury and should be used only when the weed control problem justifies the grain damage risk. Do not apply this product to grain in the seedling stage. For aerial application on grain, apply this product in 1-5 gallons of water per acre. For ground application, use 3-25 gallons of water per acre.

**PRE-HARVEST TREATMENT:** Apply 1 to 2 pints with recommended amount of water per acre when grains are in the hard dough stage to control large weeds that may interfere with harvest. Best results will be obtained when soil moisture is sufficient to cause succulent weed growth.

**CONTROL OF WILD GARLIC AND WILD ONION:** For improved control of difficult weeds including Wild garlic and Wild onion, apply 1 to 2 pints of product per acre. Since these rates may injure the crop, do not use unless possible crop damage is acceptable. For the higher rates on spring wheat and barley, consult your local State Agricultural Experiment Station or Extension Service weed specialist for recommendations or suggestions to fit local conditions.

**CONTROL OF WILD GARLIC IN STUBBLE GRAIN AND CORN FIELDS:** Following the harvest of small grains and corn, Wild garlic often produces new Fall growth. This should be sprayed with 4 to 6 pints of product in 10-40 gallons of water per acre. This is a useful practice as one part of wild garlic control program. Do not plant any crop for three months after treatment.

**SPRING SEEDED OATS:** Use 1/2 pint per acre with recommended amount of water to give good coverage. Apply after the fully tillered stage, except during the boot to dough stage.

**FALL SEEDED OATS (SOUTHERN)** apply 1/4 to 1-1/2 pints per acre with recommended amount of water after full tillering but before early boot stage. Some difficult weeds may require the higher rates of 3/4 to 1-1/2 pints per acre for maximum control but injury may result. Do not spray during or immediately following cold weather.

**NOTE:** Oats are less tolerant to 2,4-D than wheat or barley and more likely to be injured.

**GRASS SEED CROPS:** Apply 1 to 4 pints of product in up to 30 gallons of water per acre by air or ground equipment in spring or Fall to control broadleaf weeds in grass being grown for seed. Do not apply from early boot to milk stage. Spray seedling grass only after the five leaf stage, using 3/4 to 1 pint per acre to control small seedling weeds. After the grass is well established higher rates of up to 4 pints can be used to control hard-to-control annual or perennial weeds. For best results, apply when soil moisture is adequate for good growth. Do not use on bentgrass unless grass injury can be tolerated.

**GRASSES IN CONSERVATION RESERVE PROGRAM AREAS:** To control or suppress annual broadleaf weeds, apply when weeds are actively growing. Use 1/2 to 1 pint per acre when weeds are small; use higher rates on older weeds. Excessive injury may result if applied to young grasses with fewer than 6 leaves or prior to grasses being well established. To control or suppress biennial and perennial broadleaf weeds in established grasses, apply at a rate of 2 to 4 pints per acre. Apply to actively growing weeds. Treat when biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat perennial weeds in the bud to bloom stage.

**NOTE:** Suggest at least 2 gallons of water per acre by air and 5 gallons of water per acre by ground. Do not harvest or graze treated Conservation Reserve Program areas. Do not apply to grasses in the boot to dough stage if grass seed production is desired.

**SOYBEANS: FOR USE IN CROP RESIDUE MANAGEMENT SYSTEMS IN SOY-**

**BE replant only)**  
**GENERAL INFORMATION:** Lo-Vol 4D is a herbicide that provides control of many emerged susceptible annual and perennial broadleaf weeds. It may be applied prior to planting soybeans to provide foliar burndown control of susceptible annual and perennial broadleaf weeds and certain broadleaf cover crops such as those listed on this label. This product should only be applied preplant to soybeans in situations such as reduced tillage production systems, where emerged weeds are present. Apply only according to the application instructions given below. Do not use any tillage operations between application of Lo-Vol 4D and planting soybeans.

**MIXING INSTRUCTIONS:** Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal effectiveness of 2,4-D on certain weeds and may be added to the spray tank. Read and follow all directions and precautions on this label and on all labels of adjuvants or fertilizers mixed with this product.

**APPLICATION PROCEDURES:** Apply using air or ground equipment in sufficient gallonage to obtain adequate coverage of weeds. Use 2 or more gallons of water per acre in aerial equipment and 10 or more gallons of water per acre in ground equipment.

**APPLICATIONS TIMING AND USE RATES:**

2,4-D Formulation Used	Maximum Rate (per acre)	When to Apply (Days prior to planting Soybeans)
Lo-Vol 4D	3/4 - 1 pint (12-16 fl. oz.)	NOT LESS THAN 7 DAYS
	1-2 pints (16-32 fl. oz.)	NOT LESS THAN 30 DAYS

**WEEDS CONTROLLED:** Alfalfa\*, Blindweed\*, Bullnettle, Bittercress-small-flowered, Buttercup-small-flowered, Carolina geranium, Cinquefoil-common and rough, Clover-red\*, Cocklebur-common, Dandelion\*, Evening primrose-cutleaf, Garlic-wild\*, Horseweed or mare's tail, Ironweed, Lambsquarters-common, Lettuce-prickly, Morningglory-annual, Mueselitt, Mustard-wild, Onion-wild\*, Pennycress-field, Peppergrass\*, Purslane-common, Ragweed-common, Ragweed-giant, Shepherds-purse, Smartweed-Pennsylvania\*, Sowthistle-annual, Speedwell, Thistle-Canada\*, Thistle-bull, Velvetleaf, Velch-hairy\*, Virginia copperleaf.

These species are only partially controlled.

For best weed control at time of treatment, weeds should be small, actively growing, and free of stress caused by extremes in climatic conditions, diseases or insect damage. The response of individual weed species to Lo-Vol 4D is variable. Consult your local county or State Agricultural Extension Service or crop consultant for advice.

**APPLICATION RESTRICTIONS AND PRECAUTIONS:** Important Notice - Unacceptable injury to soybeans planted in fields treated with Lo-Vol 4D may occur. Whether or not soybean injury occurs and the extent of the 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. Injury is more likely under cool, rainy conditions and where there is less weed vegetation and crop residue is present.

Do not use on low organic sandy soils (<1.0).

Apply a maximum of one application per growing season regardless of the treatment rate.

**Livestock Grazing Restriction:** Do not feed hay, forage or fodder. Restrict livestock from grazing treated fields. Livestock should be restricted from feeding/grazing on treated cover crops.

In fields treated with Lo-Vol 4D, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter, if necessary, to ensure that planted seed is completely covered.

If desired, this product may be applied preplant to soybeans in tank mixtures with other herbicides that are registered for preplant soybean use. Observe all precautions on other product labels when used with Lo-Vol 4D.

Do not apply Lo-Vol 4D prior to planting soybeans if you are not prepared to accept the result of soybean injury, including possible loss of stand and yield.

Do not replant fields treated with Lo-Vol 4D in the same growing season with crops other than those labeled for 2,4-D use.

Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on growing crops may increase the herbicidal activity of 2,4-D on certain weeds and may be added to the spray tank. Read and follow all directions and precautions on this label and on all labels of adjuvants or fertilizers mixed with this product.

**SORGHUM (Milo):** For Post-emergent control in average conditions, use 1/2 pint; dry conditions (Western states) use 3/4 pint with suggested volume of 5 gallons of water by air or 5-20 gallons with ground equipment to make per acre applications. Apply to sorghum when crop is 6-15 inches high to top of canopy with secondary roots well established. If sorghum is taller than 8 inches, use drop nozzles to keep the spray off the foliage as much as possible. Do not apply during boot, flowering or early dough stage. Rates of up to 1 pint per acre may be used to control some hard-to-control weeds. However, the chance of crop injury is increased with the higher rates. Do not use with oil. Because temporary injury may occur if conditions of high temperature and high soil moisture exist, use lower rate. Varieties vary in tolerance to 2,4-D and some hybrids are quite sensitive. Spray only varieties known to be tolerant to 2,4-D. Contact seed company or your Agricultural Experiment Station or Extension Service weed specialists for this information.

**SELECTIVE WEEDING IN NON-CROP AREAS**

**ORNAMENTAL TURF such as Lawns, Golf Courses (Fairways, Aprons, Tees and Roughs), Sod Farms, Cemeteries and Parks:** Use 2 to 4 pints of product in a minimum of 10 gallons of water to give good coverage to one acre on established stands of perennial grasses. Usually 4 pints per acre provides good weed control under average conditions. On turf, apply a maximum of 4 pints of this product per acre per application per site on residential and other turf sites (excluding sod farms). The maximum number of broadcast applications is two per year. Treat when weeds are young and actively growing. Do not apply to newly seeded grasses until well established. Use higher rate for hard-to-control weeds. Use higher rate when using higher volume of water per acre. Do not exceed specified application dosages for any area. Deep-rooted perennial weeds may require repeated treatments in the same season or in subsequent years. Spray when air temperature is between 50° and 85°F. Avoid applying during excessively dry or hot periods unless irrigation (watering) is used before treatment. Reseed no sooner than 3 to 4 weeks after application of this product. Adding oil, wetting agent or other surfactant to the spray may be used to increase effectiveness on weeds but doing so may reduce selectivity to turf resulting in turf damage. Maximum control of weeds will be obtained by applying in spring and early Fall when weeds are actively growing. Do not use on golf greens or on dichondra or other broadleaf herbaceous ground covers. Do not use on creeping grasses such as bent and St. Augustine except for spot treating, or on newly seeded turf until grass is well established.

**FALLOWLAND:** Use 1 to 4 pints of this product in 1 to 5 gallons of water by air or 3 to 25 gallons of water per acre for ground application on annual broadleaf weeds and up to 6 pints per acre on established perennial species such as Canada thistle and Field bindweed. Use lower rate when annual weeds are small (2" to 3" tall) and growing actively. Use the higher rate on older and drought-stressed plants. Spray Musk thistles and other biennial species while in seedling to rosette stage and before flower stalks are initiated. The lower rate can be used in Spring during rosette stage. In Fall or after flower stalks have developed, use highest rate. Spray perennial weed in bud to bloom stage, or in good vegetative growth. Do not disturb treated area for at least 2 weeks after treatment, or until weed tops are dead. Do not plant any crop for 3 months after treatment or until chemical has disappeared from soil.

**GRASSES IN ESTABLISHED PASTURES AND RANGELANDS:** The rates of applications are per acre per application per site. Use 1 to 4 pints of product in sufficient water to give good coverage to one acre depending on type of weeds and stage of growth. Use only on established stands of perennial grasses. 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 when grass seed production is desired.

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**BITTERWEED, BROOMWEED, CROTON, DOCKS, KOCHIA, MARSHLEDER, MUSK THISTLE, AND OTHER BROADLEAF WEEDS:** Use 4 to 4.2 pints of this product in sufficient water per acre. If weeds are young and growing actively, 2 pints per acre will provide control of some species. Deep-rooted perennial weeds may require repeated treatments in the same year or in subsequent years.

**WEED CONTROL IN NEWLY SPRIGGED COASTAL BERMUDA GRASS:** Apply 2 to 4 pints of this product in 20 to 100 gallons of water per acre preemergence and/or post-emergence.

**WILD GARLIC AND WILD ONION CONTROL:** Apply 4 to 4.2 pints of product per acre making three applications, Fall-Spring-Fall or Spring-Fall-Spring, starting in the late Fall or early Spring.

**GENERAL WEED CONTROL (Airfields, Roadsides, Vacant Lots, Drainage Ditch banks, Fence rows, Industrial Sites, Rights-of-way and similar areas):** Use 2 to 6 pints of product per acre. Apply when most annual broadleaf weeds are still young and growing vigorously. Apply when perennial and biennial weeds are actively growing and near the bud stage, but before flowering. A second application is usually needed for best results on Canada Thistle, Nettle and Field Bindweed. Treat Wild onion or garlic in early Spring and in Fall when they are young and growing actively. The addition of a wetting agent such as R-11\* is suggested. Do not use on herbaceous ground covers or creeping grass such as Bent. Legumes will usually be damaged or killed. Deep-rooted perennials may require repeat applications. Do not use on freshly seeded turf until grass is well established. Delay reseeding for 30 days.

**CONTROL OF SOUTHERN WILD ROSE:** On roadsides and fence rows, use 1 gallon of this product plus 4 to 8 ounces of an agricultural surfactant per 100 gallons of water and spray thoroughly as soon as foliage is well developed. Two or more treatments may be required. On rangeland, apply a maximum of 4 pints of this product per acre per application per site.

**SPOT TREATMENT IN NON-CROP AREAS:** To control broadleaf weeds in small areas with a hand held or back pack sprayer, use 4 fluid ounces (8 Tablespoons) per 1,000 square feet; mix 1 to 3 gallons of water and apply uniformly over 1,000 square feet.

## BRUSH CONTROL

**WOODY PLANT CONTROL:** To control woody plants susceptible to 2,4-D such as Alder, Buckbrush, Elderberry, Sumac, Cherokee rose, Japanese honeysuckle, Virginia Creeper, Wild grape and Willow on non-crop areas such as rights-of-way, fence rows, roadsides and along ditch banks, use 2 to 3 quarts of product per acre in 30 to 100 gallons of water. Lower volumes of water can be used unless applying through such equipment as Direct-Spra™, Wobbler™, Mini Wobbler™, Spirometer™. Spray brush 5 to 6 feet tall after Spring foliage is well developed. Wet all parts of the plants thoroughly, including stem and foliage, to the point of runoff. Higher volumes of up to 300 to 500 gallons of spray per acre may be necessary where the brush is very dense and over 6 to 8 feet high.

Spraying can be effective at anytime 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 midsummer 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. Hard-to-control species may require re-treatment next season. In general, it is better to cut tall woody plants and spray sucker growth when 2 to 4 feet tall.

**SAND SHINNERY OAK AND SAND SAGEBRUSH:** On the oak, use 2 pints of this product in 5 gallons of oil or in 4 gallons of water plus 1 gallon of oil per acre. Apply by aircraft between May 15 and June 15. On the sagebrush, use 2 pints in 3 gallons of oil per acre and apply by aircraft when foliage is fully expanded and the brush is actively growing.

**BIG SAGEBRUSH AND RABBITBRUSH:** Use 2 to 6 pints in 2 to 3 gallons of oil or in 3 to 5 gallons of oil-water emulsion spray. For rabbitbrush, the 6 pint rate is usually required. Brush should be leafed out and growing actively when treated. Re-treatment may be needed. See page 2 for use with an adjuvant.

Chamise, Manzanita, Buckbrush, Coastal Sage, Coyotebrush and certain other Chaparral

species: Use 2 to 6 pints per acre in 5 to 10 gallons of water. One gallon of oil may be included in the spray mixture for added effectiveness. Make application by aircraft or ground equipment to obtain uniform spray coverage. For effective control, the brush must be fully leafed out and growing actively when sprayed. Re-treatment may be needed. Consult State or local brush control specialists for most effective rate, volume and timing of spray application.

**CATTAILS, TULE (BULRUSH) AND OTHER RUSHES:** Mix 4 pints of this product and 1 gallon of diesel oil or kerosene, then add this mixture to 100 gallons of water (1-1/2 to 2-1/2 quarts of Lo-Vol 4D, in 400-800 gallons of spray per acre). Addition of a wetting agent may be advisable. Apply in the Spring during flower head emergence. Spray to wet all foliage. Re-spray if needed when regrowth is 3 to 5 feet tall.

## USES IN FOREST MANAGEMENT

**Conifer Release:** For control of Alder, apply 1-1/2 to 3 quarts of product per acre in 8 to 25 gallons of water and apply as a foliage spray. Treat when 1/4 of the brush foliage has attained full size leaves and before new conifer growth reaches 2" in length. This is usually between early May and mid-June. Adjust treatment date depending on stage of growth and brush species. This may cause leader deformation on exposed firs, but they should overcome this during the second year after spraying. To control susceptible brush species such as ceanothus spp., chinquapin, madrone, manzanita, oak and tan oak and to release Douglas Fir, hemlock, Sitka spruce or grand fir, apply 2 quarts of product per acre before new growth on Douglas Fir is 2" long. To control manzanita and ceanothus in ponderosa pine, apply 3 quarts of Lo-Vol 4D before pine growth begins in Spring.

To increase performance, add 2 to 4 quarts of diesel, fuel oil, kerosene or a suitable approved agricultural surfactant at recommended label rate.

After northern conifers, Jack pine, red pine, black spruce and white spruce cease growth and "harden off" (usually in mid-July), a spray of 1-1/2 to 3 quarts of product in 8 to 25 gallons of water per acre may be applied by air to control certain competing hardwood species such as Alder, Aspen, Birch and Willow. Since treatment may cause occasional conifer injury, do not use if such injury cannot be tolerated. Consult your regional or extension forester or state herbicide specialist for recommendations to fit local conditions.

**Tree Injections (Pine Release):** To control hardwoods: such as Oak, Hickory, Maple, Pecan, Elm, Sumac, Sweetgum and Hawthorn in forest and other non-crop areas, apply this product undiluted in a concentrate tree injector calibrated to apply 1 ml. per injection. Space injections 2" apart, edge to edge, completely around the tree and close to the base. The injector bit must penetrate the inner bark. On hard-to-control species such as Hickory, Dogwood, Red maple, Blue beech and Ash, make injections 1 to 1-1/2" apart, edge to edge. Treatment may be made at any time of the year. For best results, injections should be made during growing season, May 15 - October 15. For dilute injections, mix 1 gallon of this product in 19 gallons of water.

**Dormant Application (other than Pine):** For the control of susceptible deciduous brush species such as Alder, Cascara, Cherry poplar and Serviceberry, apply up to 3 quarts of product per acre in sufficient diesel, fuel oil or kerosene for good coverage. Application may be made by ground or air and should be made before conifer bud break.

**Pine only:** Make application when pine buds are still dormant: Apply 2 quarts of product per acre in sufficient water for good coverage by air or ground equipment. Do not use this application unless some pine injury is acceptable. Use of diesel, kerosene or other oil or addition of surfactants to spray mix may cause unacceptable pine injury.

**Herbaceous Weed Control:** To control overwintering susceptible weeds such as False dandelion, Klamath weed, Plantain, Tansy ragwort, apply 1 to 3 quarts of product in sufficient water for good coverage. Make application at rates and timing indicated above if pines are present. For control of Hazel brush and similar species in the Lake States area, apply 2 quarts of product per acre in 8 to 25 gallons of water, when new shoot growth of Hazel is complete (usually mid-July).

**Site Preparation:** (As Budbreak Spray) For control of alder prior to planting seedlings, apply 2 to 4 quarts of product per acre in 8 to 25 gallons of water, after Alder budbreak but before foliage is 1/4 full size. Application may be made by air or ground. If desired, diesel,

fuel oil or kerosene may be substituted for water as diluent (as Foliage Spray). For control of Alder prior to planting seedlings, apply 2 to 4 quarts of product per acre in 8 to 25 gallons of water, after most Alder leaves are full size. To increase penetration, 2 to 4 quarts per acre of diesel, fuel oil, kerosene or a suitable approved agricultural surfactant at recommended label rates may be added to the spray mixture.

The maximum application rate for forestry site preparation is 1 gallon 6 ounces per acre per application per site.

## TANK MIXES

Read and follow the label of each tank mix product used for precautionary statements, directions for use, geographic and other restrictions.

Using Lo-Vol 4D and Buctril® for weed control on cereal grains (wheat, barley and rye): Buctril Broadleaf Herbicide will control some annual weeds that are resistant to 2,4-D and may be tank mixed with this product for broader spectrum weed control on small grains. In cereal areas except Washington, Oregon and Idaho, use 1/2 to 1 pint of this product plus 1/4 to 3/4 pint of Buctril ME4 per acre. In Washington, Oregon and Idaho, use 1/2 to 1 pint of Lo-Vol 4D plus 3/4 to 1 pint Buctril per acre. First mix this product in water, then add the Buctril. Use the higher rates for larger weeds or where weed growth is slow due to dry or cold weather. Apply before weeds are 6 inches high. Use 10 to 20 gallons total spray volume per acre with ground equipment or 5 to 10 gallons total spray volume with air application. Use higher volume on larger weeds.

Using Lo-Vol 4D with Banvel® (or Banvel® SGF) and Ally® (or Express™) and Amber™ to provide more complete Kochia control: Offers quick bumdown. Provides residual activity with Ally to control later weed flushes making harvesting easier and reducing post-harvest weed control needs. Controls broader weed spectrum while offering better control of Russian thistle, Mustards, Flaxweed and Wild buckwheat. Controls large weeds. Allows for early treatment. Apply 8 oz. of this product with 0.1 oz. of Ally plus either 2 to 3 oz. of Banvel or 4 to 6 oz. of Banvel SGF per acre. The tank mix can be applied to Spring wheat from the four-leaf stage (tillering) prior to joint. It can be applied to Spring wheat from the four-leaf stage through the five-leaf stage. Growers who want to rotate a sensitive crop following wheat and are concerned about carry-over from Ally can substitute Express in the tank mix which allows crop rotation 60 days after application. The recommended rate of Express is 1/2 oz. per acre.

\*When using Amber consult your local Ciba representative.

Using Lo-Vol 4D and Sencor® as knockdown herbicides for no-till: This product with Sencor® DF alone or in combination with Dual®, Lasso®, Surflan®, or Prowl® may be applied as an early preplant surface application for the control of certain broadleaf weeds and grasses in soybeans in minimum or no-till applications. Application is recommended 30 days prior to planting. Apply at rate of 2 pints of the product (1#A.L.) per acre with labeled rates of Sencor. Where grass herbicide is used in tank mix, apply at the rates specified on that product's label.

Using Lo-Vol 4D and Aatrex® for weed control in forest and Christmas tree plantings: A tank mix of these two products can be used to control weeds and thus aid in the establishment of young transplants of Douglas fir, Grand fir, Nobel fir, White fir, Austrian pine, Bishop pine, Jeffrey pine, Knobcone pine, Loblolly pine, Lodgepole pine, Monterey pine, Ponderosa pine, Scotch pine, Slash pine, Blue spruce and Sitka spruce.

The mix should be applied between Fall and early Spring, preferably in February or March, while trees are still dormant, or soon after transplanting. Weeds should not be more than 1-1/2" high. It can be applied with either ground or air equipment. Helicopters have been highly effective for reforestation applications on steep terrain. Uniform application is the key to good weed control. Use 20 to 40 gallons of water per acre for ground application: A minimum of 5 gallons of water when applying by air.

Be sure equipment is properly calibrated. All screens in the spray system - nozzles and in-line and suction strainers - should be 15 mesh or coarser. Use a pump with capacity to maintain a nozzle pressure of 35 to 40 psi and sufficient agitation to keep the mixture in suspension in the spray tank. If a nurse tank is used, keep the mixture agitated while awaiting transfer to the spray tank. Mix 2 to 4 quarts Aatrex 41, or 2-1/2 to 5 pounds Aatrex 80W with 1 to 3 quarts of Lo-Vol 4D. The actual rate of Aatrex used should depend on soil type. Soils high in organic matter require higher rates than light to medium soils. Band

## LO-VOL 4D

application to Christmas trees — Calculate the amount to be applied per acre. The band width in inches divided by the row spacing in inches times the rate per acre for broadcast treatment will equal the amount needed per acre for band treatment. For example, when treating a 4-foot band over trees planted in rows 8-feet apart, apply 1-1/2 to 2-1/2 pounds of Aatrex per acre. Please read Aatrex label(s) for additional instructions.

Using Lo-Vol 4D and Turbo® 8EC in reduced-tillage or no-till systems: This product may be applied in combination with Turbo 8EC for the control of annual grasses and broadleaf weeds and the suppression of emerged perennial weeds when soybeans are directly seeded into a stale seed bed, cover crop or in previous crop residues. Special precautions: Poor weed control and/or crop injury may result if directions are not followed. Do not use a rib-type press wheel on the no-till planter or crop injury may result. Apply at a rate of 2 pints of Lo-Vol 4D (1#A.I.) per acre with labeled rates of Turbo 8EC. Application is recommended 30 days prior to planting.

Using Lo-Vol 4D and Poast® as a burndown prior to planting soybeans: For broad spectrum post-emergence weed control, a tank mix application of Lo-Vol 4D with Poast may be made for control of emerged broadleaf and grass weeds before planting soybeans. Apply at a rate of 1 pint of this product (1/2 #A.I.) per acre with labeled rates of Poast.

Using Lo-Vol 4D and Scepter®, Scepter® 70 DG or Squadron® in preplant applications in no-till soybeans: For broad spectrum post-emergence weed control, a tank mix application of Lo-Vol 4D with Scepter, Scepter 70 DG or Squadron herbicides may be made for the control of emerged broadleaf and grass weeds before planting soybeans. Apply at a rate of 1 pint of this product (1/2 #A.E.) per acre up to 7 days prior to planting or 2 pints (1#A.E.) per acre up to 30 days prior to planting, with labeled rates of Scepter, Scepter 70 DG or Squadron herbicides.

Using Lo-Vol 4D and Garlon® 4 or Garlon® 3A tank Mixtures for Non-Crop Areas: Broadleaf Weed Control: Use 2 to 4 pints of this product plus 2 to 6 pints Garlon 4 (or 3 to 8 pints Garlon 3A) per acre. For wider spectrum control of broadleaf weeds and woody plants: Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing. Woody Plant Control Broadcast Foliar Spray: Use 1 to 2 gallons of this product plus 1-1/2 to 3 quarts Garlon 4 (or 2 to 4 quarts Garlon 3A) per acre. Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when woody plants are actively growing. Woody Plant Control High Volume Leaf Stem Treatment with Ground Equipment: Use 1 to 8 quarts of this product plus 1-1/2 to 12 pints Garlon 4 (or 2 to 16 pints Garlon 3A) per acre. Mix 1/2 to 2 quarts Lo-Vol 4D, plus 1-1/2 to 3 pints Garlon 4 (or 2 to 4 pints Garlon 3A) in enough water to make 100 gallons of spray. Apply at a volume of 100 to 400 gallons total spray per acre depending on size and density of woody plants. Thoroughly wet all leaves, stems and root collars of plants to be controlled. Woody Plant Control Aerial Application (Helicopter only): Use 1 to 2 gallons of this product plus 3 to 4 quarts Garlon 4 (or 4 to 6 quarts Garlon 3A) per acre. Apply in a total spray volume of 10 to 30 gallons per acre using drift control equipment such as Microfoil boom or an effective drift control agent such as Bivert® Spray Additive. Use the higher rates and volumes when plants are dense or under drought conditions.

Using Lo-Vol 4D and Banvel Herbicide tank mixtures for Non-Crop Areas: Annual Broadleaf Weeds: Use 2 to 4 pints of this product plus 1/2 to 1-1/2 pints Banvel. For wider spectrum control of broadleaf weeds and woody plants, apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing. Use the higher rates when treating dense or tall vegetative growth. Perennial and Biennial Broadleaf Weeds: Use 3 to 6 pints of this product plus 1/2 to 6 pints Banvel. Apply as a Broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing but prior to flowering. Use the lower rates for biennials less than 3-inches rosette diameter. Use the higher rates for perennial weeds or for biennial weeds past the 3-inch rosette stage. Woody Plant Control Broadcast, High volume, Stem Foliage or Aerial application: Use 1 to 2 gallons of this product plus 2 to 8 quarts Banvel. Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre or apply as a high volume stem foliage spray in enough volume to thoroughly wet leaves, stems and root collars (100 to 400 gallons per acre) or apply aerially in enough water to deliver total spray volume of 10 to 30 gallons per acre using drift control equipment such as Microfoil Boom or an effective drift control agent such as Bivert® Spray Additive. Use the higher rates and volumes when plants are dense or under drought conditions.

Using Lo-Vol 4D and Escort®, Oust® and Telar®: To improve control of some target spe-

cial product may also be tank mixed with Escort, Oust and Telar herbicide for post-emergent weed control. Tank mixes have shown improved control where resistant biotypes are present.

NOTE: All intended tank mix combinations should be used only in recommended areas on the same broadleaf weed species found on both labels. For application methods and other use specifications, use the most restricted limitations from labeling of both products.

Local conditions may affect the use of this chemical. Consult State Agricultural Extension or Experiment Station weed specialist for specific recommendations for local weed problems and for information on possible lower dosages.

### STORAGE AND DISPOSAL

**Storage:** Always use original container to store pesticides in a secured warehouse or storage building. Do not store near seeds, fertilizers, insecticides or fungicides. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not contaminate water, food or feed by storage or disposal.

**Pesticide Disposal:** Pesticide wastes are toxic. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures 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:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or other procedures approved by State and Local authorities. Plastic containers are also disposable by incineration or if allowed by state and Local authorities, by burning. If burned, stay out of smoke.

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**In EPA Letter Dated**  
DEC - 3 1996

**Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.**  
2935-511