

# LOW VOL 4 ESTER WEED KILLER

Low volatile emulsifiable formulation for control of broadleaf weeds in corn, wheat, barley, rye, oats, sorghum, and non-crop areas.

**ACTIVE INGREDIENT:** 

Isooctyl (2-ethylhexyl) este	er of 2,4-Dichlorophenoxyacetic acid*		. 65.5%
OTHER INGREDIENTS** .			. 34.5%
		ΤΟΤΔΙ	100.0%

<sup>\*</sup>Isomer specific by AOAC Method No. 6.275-6.279 (13th Ed.)

## KEEP OUT OF REACH OF CHILDREN CAUTION

#### 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 the poison control center or
	doctor.
	Do not give anything by mouth to an unconscious person.
If on skin	Take off contaminated clothing.
or clothing:	Rinse skin immediately with plenty of water for 15-20 minutes.
	Call a poison control center or doctor for treatment advice.
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 Inhaled:	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.  Call a poison central center or destar for further treatment advise.
	Call a poison control center or doctor for further treatment advice.

#### FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**NOTE TO PHYSICIAN:** Aspiration pneumonia hazard, contains petroleum distillate.

(See Below For Additional Precautionary Statements)

EPA REG. NO. 34704-124 EPA EST. NO. 34704-MT-001 NET CONTENTS 2½ GALS. (9.46 L)

<sup>\*</sup>Equivalent to 43.4% 2,4-D acid or 3.8 pounds per gallon.

<sup>\*\*</sup>Contains Petroleum Distillates.

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### **Personal Protective Equipment:**

Some materials that are chemical-resistant to this product are made of waterproof material. If you want more options, follow the instructions for category A on the EPA chemical resistance category selection chart.

#### All mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes and socks,
- Chemical-resistant gloves (except for pilots),
- Chemical-resistant apron for mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See engineering controls for additional requirements.

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.

#### **Engineering Controls**

Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)].

#### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water.
- 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 pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark except as noted on appropriate labels. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

**Groundwater Contamination:** 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.

#### 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.

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

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.

Although this product is much less volatile than butyl or isopropyl esters, at high temperatures (above 95°F.) vapors from this product may injure susceptible plants growing nearby. **Do not** use in a greenhouse. Flush sprayer out on suitable non-crop area after use. **Do not** use the same spray equipment for applying other materials to 2,4-D susceptible crops as injury may result.

#### 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 made of any water-proof material,
- Shoes plus socks.

#### 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. Do not enter or allow people or pets to enter the treated areas until sprays have dried.

#### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast, chemigation) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

#### **Droplet Size**

When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a coarse or coarser spray, apply only as a coarse or coarser spray (ASAE standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a medium or more fine spray, apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

#### Wind Speed

Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for nontarget species, nontarget crops) within 250 feet downwind. If applying a medium spray, leave one swath unsprayed at the downwind edge of the treated field.

#### **Temperature Inversions**

If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### **Susceptible Plants**

Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

#### Other State and Local Requirements

Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

#### **Equipment**

All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

Additional requirements for aerial applications: The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter. Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind.

The applicator must compensate for this by adjusting the path of the aircraft upwind.

Additional requirements for ground boom application: Do not apply with a nozzle height greater than 4 feet above the crop canopy.

**General Precautions:** 2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

#### GENERAL INFORMATION

LOW VOL 4 is recommended for control of numerous broadleaf weeds and certain 2,4-D susceptible woody plants without injury to most established grasses. Species controlled include the following, plus many others:

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beggarticks	cornflower	jimsonweed	pigweed
bitterweed	coyote brush	lambsquarters	plantains
blueweed, Texas	croton	loco, bigbend	poorjoe
broomweed	dandelion	mallow, Venice	rabbitbrush
buckbrush	docks	manzanita	radish, wild
burdock	dogfennel	marshelder	ragweed
burhead	elderberry	milkvetch	rape, wild
carpetweed	fanweed	morningglory, annual	redstem
catnip	galinsoga	mustards	sage, coastal
chamise	garlic, wild	nettles	sagebrush, big
chicory	goatsbeard	onion, wild	sagebrush, sand
cocklebur	hemp, wild	pennycress	_
coffeeweed	jewelweed	pepperweed, field	Cont'd. next page

salsify spanishneedles thistle, musk willow sand shinneryoak sumac thistle, Russian witchweed shepherdspurse sunflower tumbleweed wormwood vellow rocket sicklepod sweetclover velvetleaf smartweed tansymustard vervains yellow starthistle tansyragwort sneezeweed, bitter vetch

sowthistle, annual thistle, bull water plantain

NOTE: Local conditions, crop varieties and application regulations vary and may affect use of this herbicide. Consult local agricultural experiment station or extension service weed specialists and state regulatory agencies for recommendations in your area.

Aerial applications may be of use for control of weeds on certain crops where there would be no danger of drift to susceptible crops. Applications should only be made by applicators experienced in the use of 2,4-D formulations. Regulations governing aerial application of herbicides are in effect in many states. Consult local regulatory agencies concerning requirements before making applications.

Do not apply this product through any type of irrigation system.

**Treating Small Areas:** Two tablespoonfuls of LOW VOL 4 in 1½ gallons of water is about equal to 1½ quarts in 100 gallons.

**TO PREPARE THE SPRAY:** (1) Fill the spray tank about half full with water, then add the required amount of LOW VOL 4 with agitation, and finally the rest of the water. NOTE: LOW VOL 4 in water forms an emulsion which tends to separate unless the mixture is kept agitated. (2) If oil is added, first mix the LOW VOL 4 and the oil and then add this mixture to the water. However, with adequate agitation, the oil can be added after the LOW VOL 4 is mixed in the 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.

**TIME OF APPLICATION:** Best results are obtained when LOW VOL 4 is used on young weeds that are actively growing. Applications of lower recommended rates to susceptible annual weeds usually will be satisfactory, but for perennial weeds and other conditions, such as in very dry areas where kill is difficult, use higher recommended rates. When used as a selective spray on crops, the stage of growth of the crop must be considered. Some woody plants and weeds are hard to kill and repeat applications may be necessary.

#### **SMALL GRAINS**

#### **General Restrictions:**

The preharvest interval (PHI) is 14 days. Limited to 3.68 pints per acre (1.75 lbs ae/A) per crop cycle.

<u>Postemergence</u>: Limited to one postemergence application per crop cycle. Do not exceed a maximum of 2.63 pints per acre (1.25 lbs ae/A) per application.

<u>Preharvest:</u> Limited to one preharvest application per crop cycle. Do not exceed a maximum of 1.05 pints per acre (0.5 lbs ae/A) per application.

**Spring Wheat and Barley:** Apply ½ to 1 pint per acre (.23 to .47 lb ae/A). Spray when grain is in full tiller stage (usually 4 to 8 inches tall) but before the boot stage and when weeds are small. Do not apply before the tiller stage nor from early boot to the dough stage. Higher rates, up to 2 pints per acre (.95 lb ae/A), 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.** 

Winter Wheat and Rye: Apply ½ to 1 pint per acre (.23 to .47 lb ae/A) in the spring at full tiller stage but before the early boot stage.

**Spring Seeded Oats:** Apply ½ pint per acre (.23 lb ae/A) at the full tiller stage but before the early boot stage. Oats are less tolerant to 2,4-D than wheat or barley and are more likely to suffer some injury.

**Fall Seeded Oats (Southern) Grown for Grain:** Apply ¾ to 1½ pints per acre (.35 to .71 lb ae/A) after full tillering but before the early boot stage. Some difficult weeds may require higher rates for maximum control but crop injury may result. Do not spray during or immediately following cold weather.

**NOTE:** Do not permit dairy animals or meat animals being finished for slaughter to forage or graze treated grain fields within 7 days after treatment.

**Preharvest Treatment:** Apply 1 pint per acre (.47 lb ae/A) 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. **NOTE:** Do not feed treated straw to livestock.

#### CORN FIELD, SWEET AND POP

#### General restrictions

#### Field and pop:

Do not use treated crop as fodder for 7 days following application. The preharvest interval (PHI) is 7 days. Do not exceed a maximum of 6.3 pints per acre (3 lbs ae/A) per crop cycle.

<u>Preplant or preemergence:</u> Limited to one preplant or preemergence application per crop cycle. Maximum of 2.1 pints per acre (1.0 lb ae/A) per application.

<u>Postemergence</u>: Limited to one postemergence application per crop cycle. Maximum of 1.05 pints per acre (0.5 lb ae/A) per application.

<u>Preharvest:</u> Limited to one preharvest application per crop cycle. Maximum of 3.16 pints per acre (1.5 lbs ae/A) per application.

#### Sweet Corn:

Do not use treated crop as fodder for 7 days following application.

The preharvest interval (PHI) is 45 days.

Observe a minimum of 21 days between applications.

Do not exceed a maximum of 3.16 pints per acre (1.5 lbs ae/A) per crop cycle.

Preplant or preemergence:

Limited to one preplant or preemergence application per crop cycle.

Maximum of 2.1 pints per acre (1.0 lb ae/A) per application.

Postemergence: Limited to one postemergence application per crop cycle.

Maximum of to 1.05 pints per acre (0.5 lb ae/A) per application.

**Preemergence-**Use LOW VOL 4 in sufficient water for uniform coverage. Best results are obtained when applied 3 to 5 days after planting, but before corn emerges. **Do not** apply to light, sandy soils. **Postemergence-**Apply LOW VOL 4 from emergence to tasseling. When spraying corn above 10 inches in height, use nozzle extensions ("corn drops"), directing the spray at base of the corn plant to keep the spray off the leaves as much as possible. **Do not** apply from tassel emergence to dough stage. Crop injury is more likely to occur if corn is growing rapidly under high temperature and high soil moisture conditions. Under such conditions, use the lowest recommended rates. Delay cultivation for 8 to 10 days after application to reduce stalk breakage resulting from temporary brittleness caused by 2,4-D. Hybrids vary in tolerance to 2,4-D. Consult local agricultural experiment station or extension service weed specialists regarding the use of 2,4-D on your specific hybrid. See chart for recommended rates.

Amount of LOW VOL 4 Per Acre			
Crop (See		For Dry	
Detailed	For Average	Conditions as in	
<b>Directions Above)</b>	Conditions	Western States*	
Corn**			
Preemergence	2 pints (.95 lb ae)		
Postemergence	½ pint (.23 lb ae)	½ to ¾ pint (.23 to .35 lb ae)	

<sup>\*</sup> Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming, Kansas, Colorado & Western Nebraska.

#### SORGHUM (MILO)

**General Restrictions:** The preharvest interval (PHI) is 30 days. Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.

<u>Postemergence:</u> Limited to 1 application per crop cycle. Do not exceed a maximum of 1.05 pints per acre (0.5 lb ae/acre) per application

Apply ½ pint per acre (.23 lb ae/A) when sorghum is 5 to 15 inches tall. A higher rate of ¾ to 1 pint per acre (.35 to .47 lb ae/A) may be needed to control some weeds but the chance for crop injury is likewise increased. Do not use with oil. Do not treat before the sorghum is 5 inches tall nor during the boot, flowering or early dough stages.

If sorghum is taller than 8 inches, use drop nozzles to keep the spray off the foliage as much as possible. Temporary crop injury may occur under conditions of high soil moisture and high air temperatures. 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 and Extension Service authorities for this information.

Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.

#### FOR USE IN CROP RESIDUE MANAGEMENT SYSTEMS IN SOYBEANS (Preplant only)

**General Restrictions:** The maximum rate per crop cycle is 2 pints per acre (.95 lb ae/A). <u>Preplant:</u> Limited to 2 preplant applications per crop cycle. Maximum of 1 pint per acre (.47 lb ae/A) per preplant application. Apply not less than 7 days prior to planting soybeans. **or** 

<u>Preplant:</u> Limited to 1 application per crop cycle. Maximum of 2 pints per acre (.95 ae/A) per preplant application.

Apply not less than 15 days prior to planting soybeans.

#### **General Information**

LOW VOL 4 is a phenoxy-type herbicide that provides postemergence control of many susceptible annual and perennial broadleaf weeds. LOW VOL 4 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. LOW VOL 4 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 LOW VOL 4 and planting of soybeans.

#### **Mixing Instructions**

Compatible crop oil concentrates, agricultural surfactants and fluid fertilizers approved for use on

<sup>\*\*</sup> If only rows or bands are treated, leaving middles unsprayed, reduce dosage rate per crop acre proportionate to the ground area actually sprayed.

growing crops may increase the herbicidal effectiveness of LOW VOL 4 on certain weeds and may be added to the spray tank. Read and follow all directions and precautions on this label and on the label of each product added to the spray mixture.

#### **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 spray mixture per acre for ground equipment.

#### **Application Timing And Use Rates**

Maximum Rate Per Acre	When to Apply (Days prior to planting soybeans)
1 pint (.47 lb ae)	NOT LESS THAN 7 DAYS
2 pints (.95 lb ae)	NOT LESS THAN 15 DAYS

#### **Weeds Controlled**

alfalfa* bindweed* bittercress, smallflowered bullnettle buttercup, smallflowered Carolina geranium cinquefoil, common	cocklebur, common dandelion* dock, curly* eveningprimrose, cutleaf garlic, wild* horseweed or marestail ironweed lambsquarters,	morningglory, annual mousetail mustard, wild onion, wild* pennycress, field peppergrass* plantains purslane, common ragweed, common	smartweed, Pennsylvania* sowthistle, annual speedwell thistle, bull thistle, Canada* velvetleaf vetch, hairy* Virginia copperleaf
		•	
clover, red*	lettuce, prickly	shepherdspurse	

<sup>\*</sup>These species are only partially controlled.

In general, weeds should be small, actively growing and free of stress caused by extremes in climatic conditions, diseases, or insect damage at the time of treatment. The response of individual weeds species to LOW VOL 4 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 previously treated with LOW VOL 4 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 present at the time of application. Do not apply LOW VOL 4 as described on this label unless you are prepared to accept soybean injury, including loss of stand and yield.

Apply a maximum of one application per growing season regardless of the treatment rate. Do not use on sandy soils with less than 1% organic matter.

Do not replant fields treated with LOW VOL 4 in the same growing season with crops other than those labeled for use with LOW VOL 4.

Do not apply LOW VOL 4 when weather conditions such as temperature air inversions or wind favor drift from treated areas to susceptible plants.

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

In fields previously treated with LOW VOL 4, plant soybean seed as deep as practical or at least 1 inch deep. Adjust the planter, if necessary, to ensure that planted seed is completely covered.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in <u>Washington Toxics Coalition</u>, et al. v. EPA, C01-0132C, (W.D. WA). For further information, please refer to EPA Web site: http://www.epa.gov/espp.

#### GRASS SEED CROPS

**General Restrictions:** Limited to 2 applications per year. Maximum of 4.2 pints per acre (2.0 lbs ae/A) per application. Minimum of 21 days between applications.

Use 1 to  $1\frac{1}{2}$  pints per acre (.47 to .71 lb ae/A) in the amount of water required for uniform applications by air or ground equipment. Apply to established stands in spring from the tiller to early boot stage. Do not spray in boot stage. New spring seedings may be treated with the lower rate after the grasses have at least five leaves. Perennial weed regrowth may be treated in the fall.

Do not graze dairy animals on treated areas within 7 days after application. Do not graze meat animals on treated areas within 3 days before slaughter. Do not cut treated grass for hay within 30 days after application.

#### RANGELAND AND GRASS PASTURES

#### **General Restrictions:**

**Postemergence:** For susceptible annual and biennial broadleaf weeds: Use 2.1 pints per acre (1.0 lb ae/A) per application. For moderately susceptible biennial and perennial broadleaf weeds: Use 2.1 to 4.2 pints per acre (1.0 to 2.0 lbs ae/A) per application.

For difficult to control weeds and woody plants: Use 4.2 pints per acre (2.0 lbs ae/A) per application. Spot treatment: Use 4.2 pints per acre (2.0 lbs ae/A).

Maximum of two applications per year. Maximum of 8.4 pints per acre (4.0 lbs ae/A) per year. Wait a minimum of 30 days between applications.

If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.

**NOTE:** Do not graze meat or dairy animals on treated areas within 7 days after application. Do not cut treated grass for hay within 30 days after application. Do not use on bentgrasses, alfalfa, clover or other legumes or on newly seeded pastures. Do not apply after heading begins or when grass is in the boot to milk stage where grass seed production is desired.

**Bitterweed, Broomweed, Croton, Docks, Marshelder, Muskthistle and Other Broadleaf Weeds:** Use 4 pints (1.9 lb ae) of LOW VOL 4 per acre in the amount of water needed for uniform application. If the 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.

Wild Garlic and Wild Onion: Apply 4 pints per acre (1.9 lb ae/A), making three applications (fall-spring-fall or spring-fall-spring) starting in late fall or early spring.

**Weed Control in Newly Sprigged Coastal Bermudagrass:** Apply 2 to 4 pints (.95 to 1.9 lbs ae/A) per acre preemergence and/or postemergence.

**Sand Shinnery Oak and Sand Sagebrush:** On the oak, use 2 pints (.95 lb ae/A) 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 (.95 lb ae/A) 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 4 pints per acre (1.9 lb ae/A) in 2 to 3 gallons of oil or in 3 to 5 gallons of oil-water emulsion spray. Brush should be leafed out and growing actively when treated. Retreatment may be needed.

Chamise, Manzanita, Buckbrush, Coastal Sage, Coyotebrush and Certain Other Chaparral Species: Use 4 pints (1.9 lb ae/A) per acre in 5 to 10 gallons of water. One gallon of fuel oil may be included in the spray mixture for added effectiveness. Make applications 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. Retreatment may be needed.

#### WOODY PLANT CONTROL

**General Restrictions:** <u>Broadcast application:</u> Limited to 1 broadcast application per year. <u>Maximum of 8.4 pints per acre (4.0 lbs ae/A) per broadcast application.</u>

To control 2,4-D susceptible woody plants such as alder, buckbrush, elderberry, sumac and willow on non-crop land use 2 to 3 quarts (1.9 to 2.8 lb ae) LOW VOL 4 in 100 gallons of water. Wet thoroughly all parts of the plants including foliage and stems, to the point of run-off. Higher volumes are necessary where the brush is very dense and over 6 to 8 feet high. Applications are more effective when applied to actively growing plants. Do not treat during periods of severe drought or in early fall when leaves have lost their healthy green color. Hard-to-kill species may need retreatment the following season.

### NON-CROP AREAS SUCH AS GOLF COURSES, CEMETERIES, PARKS, ROADSIDES, VACANT LOTS

**General Restrictions:** Postemergence (annual and perennial weeds): Limited to 2 applications per year. Maximum of 3.16 pints per acre (1.5 lbs ae/A) per application. Maximum seasonal rate is 6.3 pints (3.0 lbs ae/A), excluding spot treatments. Minimum of 30 days between applications. Postemergence (woody plants): Limited to 1 application per year. Maximum of 8.4 pints per acre (4.0 lbs ae/A) per year.

Apply 2 to 3.16 pints (.95 to 1.5 lb ae) of LOW VOL 4 per acre in the amount of water needed for uniform application. Treat when weeds are young and growing well. 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. 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.

#### ORNAMENTAL TURF

**General Restrictions:** Limited to 2 applications per year. Maximum of 3.16 pints per acre (1.5 lbs ae/A) per application. The maximum season rate is 6.3 pints per acre (3.0 lbs ae/A), excluding spot treatments.

Do not use on creeping grasses such as bent and St. Augustines except for spot treating, nor on newly seeded turf until grass is well established. Reseeding of treated areas should be delayed following treatment.

#### **GENERAL WEED CONTROL**

**General Restrictions:** Postemergence (annual and perennial weeds): Limited to 2 applications per year. Maximum of 4.2 pints per acre (2.0 lbs ae/A) per application. Minimum of 30 days between applications.

<u>Postemergence (woody plants):</u> Limited to 1 application per year. Maximum of 8.4 pints per acre (4.0 lbs ae/A) 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.

Along fencerows, roadsides, industrial sites, around farm buildings and similar areas, use 1 to 2 quarts (.95 to 1.9 lb ae) of LOW VOL 4 in 100 gallons of water per acre. Thoroughly wet all foliage to run-off.

**TULE (BULRUSH) AND OTHER RUSHES:** Mix 4 pints (1.9 lb ae) of LOW VOL 4 and 1 gallon of diesel oil or kerosene, then add this mixture to 100 gallons of water. Spray to wet all foliage (400-800 gals/A). Addition of a wetting agent may be advisable. Apply in the spring during flower head emergence. Respray if needed when regrowth is 3 to 5 feet tall.

#### STORAGE AND DISPOSAL

**PROHIBITIONS:** Do not contaminate water, food, or feed by storage or disposal. Do not store under conditions which might adversely affect the container or its ability to function properly.

**PESTICIDE STORAGE:** Do not store below temperature of 0°F. If frozen, warm to 45°F. and redissolve before using by rolling or shaking the container. Store in safe manner. Store in original container only. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength. Personnel should use clothing and equipment consistent with good pesticide handling.

**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 this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

For packages up to 5 gallons. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank 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.

For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: 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 it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as** 

#### Storage & Disposal cont'd.:

**follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank 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.

For packages greater than 56 gallons: 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.

For refillable containers: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or 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.

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

#### CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**BEFORE BUYING OR USING THIS PRODUCT**, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

Follow the Directions for Use of this product carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop or other plant injury, ineffectiveness, or other unintended consequences may result from such risks as weather or crop conditions, mixture with other chemicals not specifically identified in this product's label, or use of this product contrary to the label instructions, all of which are beyond the control of LOVELAND PRODUCTS, INC. and the seller. The buyer or user of this product assumes all such inherent risks.

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