

# U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs Registration Division (7505P) Ariel Rios Building 1200 Pennsylvania Ave., NW Washington, D.C. 20460

NOTICE OF PESTICIDE: <u>x</u> Registration

\_\_ Reregistration (under FIFRA, as amended)

EPA Reg. Number:

Date of Issuance:

9468-39

DEC 23 2010

Term of Issuance:

conditional

Name of Pesticide Product:

2,4-D LV6

Name and Address of Registrant (include ZIP Code):

Ritter Chemical, LLC

P.O. Box 430974

Houston, TX 77243

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- 1. Submit and/or cite all data required for registration/reregistration review of your product when the Agency requires all registrants of similar products to submit data.
- 2. Make the following label changes:
  - a. Remove the word "plus" in the second bullet about shoes and socks under Personal Protective Equipment (PPE) on page 2.
  - b. In the heading, change "Weed and Brush Control in Small Grains, Field Corn, Rangeland, Pastures, Roadsides and Fencerows" to read "Weed and Brush Control in Wheat, Barley, Rye, Field Corn, Grass Rangeland and Pastures, Grain Sorghum, Soybeans, Roadsides, Forests and Fencerows".
  - c. Under Active Ingredient, change "isooctyl ester" to "2-ethyl hexyl ester".
  - d. Under the Total in the Active Ingredient statement, add "Contains Petroleum Distillates", and define Isomer Specific AOAC Method, Equivalent to:".
  - e. On page 6, under Restrictions and Limitations for use on Field Corn, change the statement "Do not use treated crop as fodder for 7 days following application" to "Do not use treated crop as **livestock feed** for 7 days following application."
  - f. On page 8, under Grasses Grown for Seed Production, add as a bullet after Restrictions and Limitation for Use on Grasses for Seed Production the statement

"Only allowed for use on grass grown for seed in states which control the distribution of grass straw and grass seeds screenings so they are not used for/in animal feed."

- g. On page 9, change the heading "Fencerows, Roadsides, Vacant Lots, Airfields, Railroad, Highway and Utility Rights-Of-Way, and Other Non-Crop Areas" to "Fencerows (not adjacent to cropfields), Roadsides, Vacant Lots, Airfields, Railroad, Highway and Utility Rights-of-Way, and Other Non-Crop Areas".
- h. On page 13, under the Warranty Disclaimer, on the third sentence add the bolded words "Unintended consequences, including but not limited to ineffectiveness, may result because of such factors as the presence or ineffectiveness, may result because of such factors as the presence or absence of other materials used in combination with the goods, or the manner of use or application, including weather, all of which are beyond the control of manufacturer or seller and to the extent consistent with applicable law, assumed by buyer or user.
- i. Revise the EPA Registration Number to read, "EPA Reg. No. 9468-39."

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

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

Signature of Approving Official:	Date:	
Kathryn V. Montague Product Manager 23 Herbicide Branch Registration Division (7505P)		DEC 13

EPA Form 8570-6

## 2,4-D LV6

**Broadleaf Herbicide** 

ACCEPTED with COMMENTS

Weed and Brush Control in Small Grains, Field Corn, Rangeland, Pastures, Roadsides and EPA Letter Dated **Fencerows** 

**ACTIVE INGREDIENT:** OTHER INGREDIENTS:

12.7% as amended, for the pesticide TOTAL: 100.0% registered under EPA Reg. No.

DEC 2.3 2010 Under the Federal Institution

Isomer Specific AOAC Method, Equivalent to: \*2,4-Dichlorophenoxyacetic Acid: 57.9% - 5.5 lbs./gal.

468-39

### KEEP OUT OF REACH OF CHILDREN **CAUTION**

	FIRST AID
If in eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If swallowed:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything by mouth to an unconscious person.</li> </ul>
If on skin or clothing:	<ul> <li>Take off contaminated clothing.</li> <li>Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If inhaled:	<ul> <li>Move person to fresh air.</li> <li>If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li> <li>Call a poison control center or doctor for further treatment advice.</li> </ul>
	HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For emergency information concerning this product, call the National Pesticides Information Center (NPIC) at 1-800-858-7378 seveփ days a week, 6:30 am to 4:30 pm Pacific Time or your poison control center at 1-800-222-1222.

#### NOTE TO PHYSICIAN

No specific antidote is available. All treatments should be based on observed signs and symptoms of distress in the patient. Overexposure to materials other than this product may have occurred. This product contains petroleum distillates. If large amounts, greater than 1 mg/kg body weight have been ingested, the stomach should be evacuated by gastric intubation with the aid of a cuffed endotracheal tube to prevent aspiration of petroleum distillates. Aftaremoval of stomach contents, wash stomach by instilling 30 to 50 grams of activated charcoal in 3 to 4 ounces of water through the stomach tube and again remove stomach contents. Avoid oil laxatives.

See inside label booklet for additional Precautionary Statements.

EPA Reg. No. 9468-xx

EPA Est. No.

Manufactured for: Ritter Chemical, LLC P.O. Box 430974 Houston, TX 77243

**Net Contents:** 

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Do not get in eyes, on skin or on clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

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

- Long-sleeved shirt and long pants,
- · Shoes and socks, plus
- Chemical-resistant gloves (except pilots) and
- Chemical-resistant apron when mixing, 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 Control Statements:**

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)], the handler PPE (personal protective equipment) may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed it he 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 is 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. 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.

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.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label before using this product. 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 green houses, 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 waterproof material
- Shoes plus socks

#### PRECAUTIONS AND RESTRICTIONS

Do not apply this product through any type of irrigation system. Do not use in or near a greenhouse.

#### MIXING INSTRUCTIONS

Add 1/2 the required amount of water to the spray tank, then add this product with agitation, and finally, the balance of the water with continued agitation. This material forms an emulsion in water, not a solution. This tends to separate on standing. Provide agitation to prevent such separation and insure uniform spray mixtures

#### COMPATIBILITY

If this herbicide 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 quart) 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. Indications of incompatibility usually will appear within 5 to 15 minutes after mixing.

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

#### COMBINATION WITH LIQUID NITROGEN FERTILIZER

Use 1/3 to 1/2 pint of this product per acre for weeding and feeding corn, small grains or grass pastures as directed on this label. Use fertilizer at rates recommended by supplier or Extension Service Specialist.

Fill the spray tank about half full with the liquid fertilizer, then add this product with vigorous agitation, and complete filling the tank with fertilizer. Apply immediately and continue agitation in the spray tank during application. Application during very cold weather (near freezing) is not advisable. Do not allow mixture to stand overnight. Incompatibility may be encountered with some fertilizer brands or under some environmental conditions. If in doubt, test a small sample in the dilution ratio planned for application.

**NOTE:** Fertilizers can increase foliage contact burn of herbicides. Reducing the fertilizer rate and concentration will reduce the hazard of leaf burn.

#### PRODUCT INFORMATION

This product contains the isooctyl ester of 2,4-D, the original and one of the best low volatile esters. In cropland, this herbicide is more effective than amines for controlling hard-to-kill weeds such as bindweed, thistle, smartweeds, wild garlic, curled dock, tansy ragwort and wild onions.

INJURY TO CROPS FROM THIS HERBICIDE MAY OCCUR. IF YOU ARE NOT PREPARED TO ACCEPT SOME DEGREE OF CROP INJURY, DO NOT USE THIS PRODUCT.

Crop varieties vary in response to 2,4-D and some are easily injured. Apply this herbicide 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.

#### 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 ontarget 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.

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.

Do not apply with a nozzle height greater than 4 feet above the crop canopy.

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.

WEED LIST
ANNUAL AND BIENNIAL WEEDS

annual vellow sweetclover

\*beggarticks bull thistle coffeeweed

\*common broomweed common burdock common cocklebur common evening primrose common lambsquarters

croton (Texas or woolly) hairy galinsoga

iimsonweed

\*knotweed

\*mallow (venice, dwarf, little)

marshelder

morning glory (common, ivy, woolly) mustards (except blue mustard) pepperweeds (except perennial) \*\*pigweeds (Amaranthus spp.)

\*prickly lettuce ragweed (common, giant)

rough fleabane \*Russian thistle

salsify (western or common)

\*smartweeds (annual species)

sowthistle (annual or spiny)

sunflower velvetleaf \*vervains vetches

\*wild carrot wild lettuce wild parsnips

wild radish

**PERENNIAL WEEDS** 

\*alfalfa

blue lettuce

catnip chicory dandelion

\*bindweed (hedge, field & European)

\*Canada thistle

\*docks

\*dogbanes

\*goldenrod \*ground ivy

\*hawkweed (orange)

healali \*hoary cress

Jerusalem - artichoke \*many-flowered aster

\*nettles (including stinging)

plantains

sowthistle (perennial)

\*tansy ragwort

\*vervains

\*western ironweed

\*wild garlic \*wild onion

#### SPECIFIC USE DIRECTIONS

CÉREAL GRAINS: WHEAT, BARLEY AND RYE (not underseeded with legumes)

_ /		
Post-emergence Annual and biennial weeds Perennial broadleaf weeds	1/3 to 1-1/3 pints* 2/3 to 1-1/3 pints*	Apply after grain is well tillered (usually about 4 to 8 inches high) but before boot. Do not spray grain in boot to dough stage.
Wild onion or garlic	1 to 1-1/3 pints*	Apply 1 pint when grain is well tillered and wild garlic or onion plants are small. Apply 1-1/3 pints after harvest in the crop stubble. For control of new fall growth of wild onion or garlic, refer to FALLOWLAND use directions.
Emergency Weed Control in Wheat Perennial broadleaf weeds	1.75 pints*	Apply when weeds are approaching bud stage, but do not spray grain during the boot to dough stage. The 1.75 pints 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.
Preharvest	2/3 to 3/4 pint*	Apply when grains are in the hard dough stage to suppress large weeds that may interfere with harvest. Best results will be obtained when soil moisture is sufficient to induce succulent weed growth.

<sup>\*</sup>Use the 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-kill categories as determined by local experience. The higher rates increase the risk of grain injury and should be used only where the weed control problem justifies the risk of grain damage. Do not apply to grain in the seedling stage.

Note: Maximum rate 1 pint per acre from jointing to before boot stage. Treatment at this growth stage (jointing to before boot) should be used where such increased risk of injury to crop is acceptable. Higher lates listed on this label are more likely to cause crop injury.

<sup>\*</sup>These species may require repeat applications and/or use of the higher rate recommended on this product label even under ideal conditions for applications.

<sup>\*\*</sup>Control of pigweeds in the High Plains area of Texas and Oklahoma may not be satisfactory with this product.

#### RESTRICTIONS AND LIMITATIONS FOR USE ON CEREAL GRAINS

- For aerial application on grain: Apply this product in 2 or more gallons of water per acre.
- For ground application: A minimum of 10 to 15 gallons of water per acre is recommended for proper spray coverage.
- Do not mix with oil for crop uses.
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated grain fields within 2 weeks after treatment.
- Do not feed treated straw to livestock if a preharvest treatment or emergency treatment as described above is applied.
- Limited to 1.75 lbs ae (2.5 pints of product) per acre per crop cycle.

#### Post-emergence:

Limited to one post-emergence application per crop cycle. Maximum 1.75 pints per acre per application.

#### Preharvest:

The preharvest interval (PHI) is 14 days.

Limited to one preharvest application per crop cycle.

Maximum of 3/4 pint per acre per application.

#### **FIELD CORN**

	TILLD COTTI				
APPLICATION TIMING		AMOUNT OF 2,4-D LV6 PER ACRE		DIRECTIONS	
Preplant		2/3 to 1-1/3 pints	crops prior to pla Do not use on inadequate for no	ed broadleaf weed seedlings or existing cover nting corn, apply 7 to 14 days before planting. light, sandy soil, or where soil moisture is ormal weed growth. Use high rate for control of weeds or cover crops such as alfalfa.	
Pre-emergence		1-1/3 to 1-1/2 pints	3 to 5 days after on soil high in org	eaf weeds and suppress annual grasses, apply planting, but before corn emerges. Use high rate ganic matter. Do not use on light, sandy soil, or ure is inadequate for normal weed growth.	
Post-emergence Annual broadleaf weeds Perennial broadleaf weed	ds	1/3 pint 1/2 pint	Apply when weed If corn more than Spray when weed than 8 inches tall Do not spray cor	st after corn leaves unfold as injury may occur. ds are small and corn is less than 8 inches tall. 8 inches tall must be sprayed, use drop pipes. ds are in the bud to bloom stage. If corn is more , use drop pipes to keep spray off corn leaves. n from tassel to dough stage. 2,4-D may make s or cultivation may cause stalk breakage while	
Preharvest		2/3 to 1-1/3 pints	interfere with har jimsonweed, rag production of we	ough (denting) stage, to suppress weeds that vest such as bindweed, cocklebur, dogbane, weed, sunflower and velvetleaf, and to decrease ed seeds, spray with air or ground equipment. be needed for tough weeds under stress.	

#### RESTRICTIONS AND LIMITATIONS FOR USE ON FIELD CORN

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

Maximum of 4.25 pints per acre per crop cycle.

The preharvest interval (PHI) is 7 days.

#### Preplant or pre-emergence:

Limited to one preplant or preemergence application per crop cycle.

Maximum of 1.5 pints per acre per application.

#### Post-emergence:

Limited to one post-emergence application per crop cycle.

Maximum of 3/4 pint per acre per application.

#### Preharvest:

Limited to one preharvest application per crop cycle. Maximum of 2.25 pints per acre per application.

#### GRAIN SORGHUM (mild)

APPLICATION TIMING	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS
Post-emergence	1/2 to 3/4 pint	To control emerged annual and perennial broadleaf weeds when the sorghum is 6 to 15 inches tall (to top of canopy). If sorghum is taller than 8 inches to top of caropy, use drop nozzles to keep spray off crop folage. Do not treat during boot, flowering, or early dough stages.

#### RESTRICTIONS AND LIMITATIONS FOR USE ON SORGHUM

- A minimum application volume of 5 gallons per acre by air or 10 gallons per acre by ground is recommended.
- •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.

#### Post-emergence (esters):

Limited to 1 application per crop cycle.

Maximum of 3/4 pint per acre per application.

SOYBEANS (Preplant Only)\*

	SOTBEANS (Freplant Only)		
APPLICATION TIMING	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS	
Preplant	1/2 to 2/3 pint	Apply not less than 7 days prior to planting soybeans, when weeds are small and actively growing. Use the higher rate on larger weeds and when perennials are present. Some weeds may require repeat treatment for adequate control (see WEED LIST and below).	
	> 2/3 to 1-1/3 pints	Apply not less than 15 days prior to planting soybeans, when weeds are actively growing. Some weeds may require repeat treatment for adequate control (see WEED LIST and below).	
		In addition to those weeds fourd suppress or control the following broadleaf weeds frequently encountered in reduced tillage soybean production systems: bullnettle, smallflowered bittercress, Carolina geraneum smallflowered buttercup, common and rough cinquefoil, red clover* horseweed or marestail, mousetail, wild mustard, field pennycress, cutleaf evening primrose, common purslane, speedwell, and Virginia copperleaf.  * These weeds are only partially controlled.  Apply no more than 1-1/3 pints of this herbicide in one season prior to planting soybeans. After applying, plant soybean seed as deep as practical or at least 1-1/2 to 2 inches deep. Adjust the planter press wheel, if necessary, to ensure that planted seed is completely covered. If desired, this product may be applied pre-plant to soybeans in tank mixtures with other herbicides such as Poast*, Poast Plus*, Roundup*, Roundup D-Pak*, Honcho*, Gramoxone* Extra, Prowf*, Pursuit Plus*, Scepter*, Scepter 70 DG*, Squadron* and others that are registered for pre-plant soybean use.  NOTE: Unacceptable injury to soybeans planted in fields previously treated with this herbicide may occur. Whether or not soybean injury occurs and the extent of the injury will depend on weather and agronomic factors such as the amount of weed vegetation and previous crop residue present that may be in effect between the time of herbicide application and the emergence of the soybean plant.	

<sup>\*</sup> Not currently registered in California.

#### RESTRICTIONS AND LIMITATIONS FOR USE IN SOYBEANS (PRE-PLANT)

- Do not apply this product prior to planting soybeans if you are not prepared to accept the results of soybean injury including possible loss of stand and yield.
- Do not apply this product when weather conditions such as temperature, air inversions, or wind favor drift from treated areas to susceptible plants.
- Do not mow or cultivate weeds prior to treating with this herbicide as poor control may result.
- Do not feed treated hay, forage, or fodder or graze treated soybeans to livestock.
- Do not feed or graze treated cover crops to livestock.

#### **Preplant Option 1:**

Limited to 2 preplant applications per crop cycle.

Maximum of 0.75 pint per acre per preplant application.

#### **Preplant Option 2:**

Limited to 1 application per crop cycle.

Maximum of 1.5 pints per acre per preplant application.

Applicator may choose only one of the options for a single crop cycle (Preplant Option 1 or Preplant Option 2).

#### **GRASSSES GROWN FOR SEED PRODUCTION**

WEEDS	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS
Annual broadleaf weeds	2/3 to 1 pint	Apply to established stands in the spring before the seed head comes into the boot stage. Do not spray in boot stage of growth. In seedling grasses
Biennial and Perennial broadleaf weeds	1-1/3 to 2 pints	apply in the spring after the grass has tillered or has at least 5 leaves but before the boot stage. Use only the low rate on seedling grasses.  DO NOT USE IN CALIFORNIA

#### RESTRICTIONS AND LIMITATIONS FOR USE ON GRASSES FOR SEED PRODUCTION

• Do not graze dairy animals or cut forage for hay within 7 days of application.

Limited to 2 applications per year.

Maximum of 3 pints per acre per application.

Minimum of 21 days between applications.

#### **ESTABLISHED GRASS PASTURES AND RANGELAND**

WEEDS IN CROP	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS
Annual broadleaf weeds	1-1/3 pints	Apply when weeds are small and actively growing and prior to bud stage.
Perennial and biennial broadleaf weeds	2 to 2-2/3 pints	Do not apply to newly seeded areas until grass is well established. Do not apply when grass is in the boot to milk stage if grass seed production is desired. Bentgrass and legumes may be injured by this treatment.
Sand sage, sagebrush, shinnery oak and other 2,4-D susceptible woody species	2/3 to 2-3/4 pints	Apply aerially to brush in 2 or more gallons of water per acre. One gallon of fuel oil may be included in the mixture. Consult state or local brush control specialists for most efective rate, volume and timing of spray applications.

#### FALLOW LAND AND CROP STUBBLE

WEEDS	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS
Annual broadleaf weeds	2/3 to 1-1/3 pints	Use the lower rate when weeds are small (2 to 3 inches tall) and growing actively. Use the higher rate on older and drought-stressed plants.

Biennial broadleaf weeds	2/3 to 1-2/3 pints	Spray while musk thistles or other biennial species are in the 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 the highest rate.
Perennial broadleaf weeds	1-1/3 to 3 pints	Spray weeds 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.
Wild garlic or onions	2-2/3 to 3 pints	Apply to new regrowth of wild onion or garlic which occurs in the fall following harvest of small grains, soybeans, corn or grain sorghum.

#### RESTRICTIONS AND LIMITATIONS FOR USE ON PASTURES, RANGELAND, AND FALLOW LAND

- For ground application, a minimum of 10 to 15 gallons of water per acre is recommended for proper spray coverage.
- For aerial application, use a minimum of 2 gallons of water per adre.
- Do not graze animals on treated areas within 7 days after treatment.
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated fields within 3 days of slaughter.

#### Fallow land:

Plant only labeled crops within 29 days following application.

Limited to 2 applications per year.

Maximum of 3 pints per acre per application.

Minimum of 30 days between applications.

#### Pasture and Rangeland:

Do not cut forage for hay within 7 days of application.

#### Postemergence:

For susceptible annual and biennial broadleaf weeds: Use 1.5 pints per acre per application.

For moderately susceptible biennial and perennial broadleaf weeds: Use 1.5 to 3.0 pints per acre per application.

For difficult to control weeds and woody plants: Use3 pints/acre per application.

#### **Spot treatment:**

Use 3 pints per acre.

Maximum of two applications per year. Maximum of 5.75 pints per acre per year.

Minimum of 30 days between applications.

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

# FENCEROWS, ROADSIDES, VACANT LOTS, AIRFIELDS, RAILROAD, HIGHWAY AND UTILITY RIGHTS-OF-WAY, AND OTHER NON-CROP AREAS

WEEDS	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS
Annual broadleaf weeds	1-1/3 to 2-2/3 pints	Apply when most weeds are still young and growing vigorously.
Perennial and Biennial broadleaf weeds	2 to 3 pints	Apply when weeds are actively growing and near the bud stage, but before flowering. For best results on tansy ragwort and musk thistle, that in rosette stage, before bolting. A second application is usually needed for best results on thistle, nettle and bindweed. Treat wild onion or garlic in early spring and in fall when they are young and growing actively.
Cattails and tules	1-1/3 quarts	Mix 1-1/3 quarts of this product per acre in 2 quarts kerosene or diesel oil then add this mixture to 100 gallons of water. This may require 300 to 500 gallons of water per acre, depending on the stand. The addition of a wetting agent such as SURFEL® spray adjuvant is suggested.
		Apply preferably through low volume equipment such as DIRECTA-SPRA®,

Woody plants		WOBBLER®, MINI-WOBBLER® or SPIROMETER®. Treat when 2,4-D susceptible species are in full leaf and growing actively. Oil or wetting agent and/or high volume spraying (300 to 500 gallons of water per acre) may be needed for acceptable control of some species or if brush is dense.
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#### RESTRICTIONS AND LIMITATIONS FOR USE IN NON-CROP AREAS

- For aerial application to solid stands of susceptible brush, use 1-1/3 to 2-2/3 quarts in 3 to 12 gallons volume per acre. 2 to 4 quarts of fuel oil may be included in this mixture.
- Applications will be less effective when conditions such as deficient soil moisture reduce brush growth.

#### Post-emergence (annual and perennial weeds):

Limited to 2 applications per year.

Maximum of 3 pints per acre per application.

Minimum of 30 days between applications.

#### Post-emergence (woody plants):

Limited to 1 application per year.

Maximum of 4.75 pints per acre per year.

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

# TANK MIXTURES FOR NON-CROP AREAS 2,4-D LV6 AND TAHOE® 4E OR TAHOE® 3A Tank Mixtures for Non-Crop Areas

2,4-D LV6 AND TAHOE 4E OR TAHOE 3A Tank MIXTURES for Non-Crop Areas		
WEEDS	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS
Broadleaf weed control	1-1/3 to 2-2/3 pints 2,4-D LV6 plus 2 to 6 pints TAHOE® 4E or 3 to 8 pints TAHOE® 3A	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	2 to 3 pints 2,4-D LV6 plus 1-1/2 to 3 quarts TAHOE® 4E or 2 to 4 quarts TAHOE® 3A	Apply as a broadcast spray in enough water to wet all parts of the brush foliage, stem and bark. This may require 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 High volume leaf-stem treatment with plus ground equipment	5.75 pints 2,4-D LV6 plus 1-1/2 to 12 pints TAHOE® 4E or 2 to 16 pints TAHOE® 3A	Apply as broadcast spray in erough water to thoroughly well leaves, stems and root collars, or apply as a high volume stem foliage spray in enough volume to thoroughly wet leaves, stems and root collars (100 to 400 gallons of water per acre) or apply aerially in enough water (10 to 30 gallons per acre) using drift control equipment such as the MICROFOIL boom or an effective drift control agent such as LO-DRIFT spray additive. Use the higher rates and volumes when plants are dense or under drought conditions.
Woody plant control Aerial application (helicopter only)	5.75 pints 2,4-D LV6 plus 3 to 4 quarts TAHOE® 4E or 4 to 6 quarts TAHOE® 3A	Apply in enough water to wet all parts of the brush foliage, stem and bark. This may require 10 to 30 gallons of water per acre using drift control equipment such as the MICRO-FOIL® boom or an effective drift control agent such as LO-DRIFT® spray additive. Use the higher rates and volumes when plants are dense or under drought conditions.

### 2,4-D LV6 AND DIABLO® (Dicamba DMA) Herbicide Tank Mixtures for Non-Crop Areas

WEEDS	AMOUNT OF 2,4-D LV6 PER ACRE	DIRECTIONS
Annual broadleaf weeds	1-1/3 to 2-2/3 pints 2,4-D LV6 plus 1/2 to 1-1/2 pints DIABLO <sup>®</sup> (Dicamba DMA)	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	2 to 3 pints 2,4-D LV6 plus 1/2 to 6 pints DIABLO <sup>®</sup> (Dicamba DMA)	Apply as a broadcast spray in enough water to wet all parts of the brush foliage, stem and bark. This may require 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	5.75 pints 2,4-D LV6 plus 2 to 8 quarts DIABLO <sup>®</sup> (Dicamba DMA)	Apply as broadcast spray in enough water to thoroughly wet leaves, stems and root colars, or apply as a high volume stem foliage spray in enough volume to thoroughly wet leaves, stems and root collars (100 to 400 gallons of water per acre) or apply aerially in enough water (10 to 30 gallons per acre) using drift control equipment such as the MICRO-FOIL boom or an effective drift control agent such as LO-DRIFT spray additive. Use the higher rates and volumes when plants are dense or under drought conditions.

### RESTRICTIONS AND LIMITATIONS FOR TANK MIXTURES FOR NON-CROP AREAS

- For postemergence annual and prenennial weeds do not make more than 2 applications per year with a minimum of 30 days between applications.
- For postemergence woody plant control do not make more than 1 application per year.

#### SMALL AREA APPLICATIONS FOR NON-CROP USE

For control of broadle af weeds in small non-crop areas with hand held or back-pack sprayers mix 2-2/3 fluid ounces of this herbicide per gallon of water. Thoroughly wet all weed foliage. Maintain agitation of mixture to prevent separation.

#### FOREST MANAGEMENT

#### **CONIFER RELEASE**

To control alder, apply 2/3 to 2 quarts of this product in 9-1/2 to 15 gallons of water per acre as a foliage spray. Usually 1-1/3 quarts of this herbicide per acre is sufficient to provide good alder control with minimum conifer injury. Treat when 3/4 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 of conifers and brush species. This may cause leader deformation on exposed firs, but they should overcome this during the second year after spraying.

To control tanoak, madrone, ceanothus, canyon live oak, and manzanita, and to release Douglas fir, hemlock, Sitka spruce or grand fir, apply 2 quarts of this product plus 3 quarts fuel oil in 8-1/2 to 15 gallons of water per acre before new growth on Douglas fir is 2" long. To control manzanita and ceanothus in ponderosa pine, apply 3 quarts of this product before pine growth begins in spring.

To control hazel brush in the Lake states, apply 1-2/5 quarts of this product in 6 to 25 gallons of water per acre when new shoot growth of hazel is complete (usually mid-July).

In northern areas, if possible conifer injury can be tolerated, 1 to 2 quarts of this product applied aerially in 8 to 25 gallons of water per acre after conifers such as jack pine, red pine, black spruce, and white spruce have hardened off (usually mid-July) will provide control of competing hardwoods including alder, aspen, birch, hazel and willow.

#### SITE PREPARATION

Budbreak Spray: To control alder and other susceptible species before planting forest seedlings, apply

1-2/5 to 2-3/5 quarts of this product in 9 to 15 gallons of water per acre plus 2 quarts of fuel oil per acre after alder buds break, but before foliage is 1/4 full size.

**Foliage Spray:** To control alder before planting forest tree seedlings, apply 1-2/5 quarts of this product plus 2 quarts fuel oil in 9 to 15 gallons of water per acre after most alder leaves are full size.

Consult your regional or extension forester or state herbicide specialist for recommendations to fit local conditions.

This product will either kill, control or suppress the weeds listed in the label booklet for this product. Some of these species may require repeat spot applications even under ideal conditions.

#### RESTRICTIONS AND LIMITATIONS FOR USE IN FOREST MANAGEMENT

#### Broadcast application:

Limited to 1 broadcast application per year.

Maximum of 5.75 pints per acre per broadcast application.

#### Basal spray, Cut Surface - Stumps, and Frill:

Limit of one basal spray or cut surface application per year.

Maximum of 11.5 pints per 100 gallons of spray solution.

#### Injection:

Limit to one injection application per year.

Maximum of 1.45 ml of 5.5 lb. ae formulation per injection site.

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. EP, C01-0132C, (W.D. WA). For further information, please refer to <a href="http://www.epa.gov/espp/wtc">http://www.epa.gov/espp/wtc</a>.

#### STORAGE AND DISPOSAL

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

**PESTICIDE STORAGE:** Store in original container in a dry, secured storage area. Keep container tightly closed when not in use.

**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 HANDLING:

#### [NONREFILLABLE CONTAINERS]

Nonrefillable container. Do not reuse or refill this container. promptly after emptying.

Triple rinse container (or equivalent)

(Nonrefillable container ≤ 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 1/4 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Nonrefillable > 5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 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. Turn the container over onto its

other 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### [REFILLABLE CONTAINERS]

Refillable container. 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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

#### WARRANTY DISCLAIMER

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[EPA approval date]