

VH.23 264-20

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

21 OCT 1992

Karen S. Shearer
Rhone-Poulenc AG Company
P.O. Box 12014
2 T.W. Alexander Drive
Research Triangle Park, NC 27709

Dear Ms. Shearer:

Subject: Label Amendment - 2,4-D Use in Reduced or No-Tillage
Soybeans (Pre-plant Only)
Weedone LV4 Broadleaf Herbicide
EPA Registration No. 264-20
Your Submission Dated July 23, 1992

The Agency is conditionally approving an amendment to the registration of the above-referenced product under the authority of section 3(c)(7)(B) of the Federal Insecticide, Fungicide Act (FIFRA). This amendment allows use of the subject product on reduced or no-tillage soybeans (pre-plant only) with a maximum permissible level for residues of the herbicide in or on soybeans of 0.1 ppm. This amendment will expire automatically on December 31, 1995. In addition, during the period that this amendment is effective, it will be subject to the conditions listed below.

1. To maintain your registration, the following data must be submitted to the Agency by the Industry Task Force II for 2,4-D Research Data:

- a. Field residue trials conducted in seven (7) states of TN, AR, IN, IL, MN, MO and MS or LA. - Due Date: January 31, 1994
- b. Exaggerated residue conducted in three (3) locations, likely IL, MN, and MS or LA. - Due Date: January 31, 1994
- c. Plant metabolism studies, in three (3) representative, dissimilar crops - Due Date: January 31, 1994

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SURNAME	D. KENNY						
DATE	10/21/92						

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d. Animal metabolism studies (poultry and ruminant) as outlined in the Residue Chemistry Chapter of 2,4-D Registration Standard - Due Date: January 31, 1994

e. Adequate storage stability data for all analyses - Due Date: January 31, 1994

2. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

3. Submit production information (pounds or gallons produced) for the product for the fiscal year in which this use is conditionally registered, in accordance with FIFRA section 29. The fiscal year begins October 1 and ends September 30. The product information will be submitted to the Agency no later than November 15, following the end of the preceding fiscal year.

This information should be submitted to:

Environmental Protection Agency
Registration Division (H7505C)
Registration Support Branch
401 M Street, S.W.
Washington, DC 20460

REG-100-1128

4. Submit one (1) copy of your final printed labeling before you release the product for shipment.

You should note that if you fail to satisfy any of the conditions imposed on this registration, e.g., you fail to submit the required data by the specified deadlines or the data submitted were not generated in accordance with the applicable test guidelines, EPA may issue a notice to cancel this amendment under FIFRA section 6(e).

You should also note that, regardless of whether you satisfy all applicable conditions, this conditional registration will expire automatically on December 31, 1995. Sale and distribution of the subject product bearing labeling for this use on reduced or no-tillage soybeans (pre-plant only) after December 31, 1995 will be illegal. The tolerance authorizing residues of the subject product will also expire automatically, two (2) years after the date published in the FEDERAL REGISTER. 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.

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Finally, once the required data have been submitted and a permanent tolerance established, EPA will entertain an application to amend the registration of the subject product without any special limitations on the duration of the amendment.

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

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide
Registration Division (H7505C)

Enclosure

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4113E 204-00 44B

WEEDONE® LV4 Broadleaf Postemergence

Herbicide

The 2,4-D low volatile ester for agricultural weed control, conifer release, site preparation, turf and non-cropland weed control.

ACCEPTED
with COMMENTS
EPA Letter Dates

ACTIVE INGREDIENT:

*2,4-Dichlorophenoxyacetic acid, butoxyethyl ester 60.8%

INERT INGREDIENTS:

*2,4-Dichlorophenoxyacetic acid equivalent 41.9% by weight or 3.8 pounds per gallon 39.2%

*Isomer specific by AOAC method No. 6.D01-5

01 OCT 1992
Under the Federal Insecticide, Fungicide, and Plant Growth Regulator Act, as amended, for use as a pesticide registered under EPA Reg. No. 264-20

E.P.A. Reg. No. 264-20ZA

E.P.A. Est. No. 264-MO-01

KEEP OUT OF REACH OF CHILDREN CAUTION

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-334-9745

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: If patient is conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting. Get medical attention.

IF ON SKIN: Wash skin with plenty of soap and water, if available, while removing contaminated clothing and shoes. Wash clothing separately before reuse.

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Get medical attention.

IF INHALED: Remove victim to fresh air. If not breathing, administer artificial respiration. Administer oxygen if necessary. Get medical attention.

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 ml/kg of body weight) of the product 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. After removal of stomach contents, wash stomach by instilling 30-50 grams of activated charcoal in 3-4 ounces water through the stomach tube and again remove stomach contents. Avoid oily laxatives.

PRECAUTIONARY STATEMENTS

CAUTION

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or clothing. Avoid breathing vapors or spray mist. When handling product, wear chemical resistant gloves. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling.

ENVIRONMENTAL HAZARDS

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

Do not apply when weather conditions favor drift from treated areas. Do not use the same spray equipment for other purposes unless thoroughly cleaned. Do not contaminate water used for irrigation or domestic purposes.

MIXING AND LOADING: Most cases of ground water 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 ground water 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 ground water contamination.

Do not apply WEEDONE® LV4 Broadleaf Postemergence Herbicide directly to, or permit spray mist to drift onto cotton, okra, grapes, tomatoes, fruit trees, vegetables, flowers or other desirable crop or ornamental plants which are susceptible to 2,4-D herbicide. Do not apply near susceptible plants since very small quantities of the 2,4-D will cause severe injury during the growing or dormant periods. Crops contacted by WEEDONE® LV4 Broadleaf Postemergence Herbicide sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

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Do not apply when a temperature air inversion exists. Such a condition is characterized by little or no air movement 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.

Use coarse sprays to minimize drift. Do not apply with hollow cone type insecticide or other nozzles that produce fine spray droplets.

Drift from aerial or ground application may be reduced by: (1) applying as near to the target as possible in order to obtain coverage; (2) by increasing the volume of spray mix per acre; (3) by decreasing the pounds of pressure at the nozzle tip; (4) by using nozzles which produce a coarse spray pattern; (5) by not applying when wind is blowing toward susceptible valuable plants.

At high air or ground surface temperatures, vapors from this product may injure susceptible plants.

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.

STORAGE AND DISPOSAL

STORAGE

Do not contaminate water, food or feed by storage or disposal. 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 ground water. 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 by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

WEEDONE® LV4 Broadleaf Postemergence Herbicide contains the butoxyethyl ester of 2,4-D, the original and one of the best low volatile esters. In cropland, WEEDONE® LV4 is more effective than amines for controlling hard-to-kill weeds such as bindweed, thistles, 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 WEEDONE® LV4 only 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.

GENERAL CAUTIONS AND RESTRICTIONS

Do not apply WEEDONE® LV4 Broadleaf Postemergence Herbicide through any type of irrigation system.

Do not use in or near a greenhouse.

MIXING INSTRUCTIONS

Add one-half the required amount of water to the spray tank, then add the WEEDONE® LV4 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 WEEDONE® LV4 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. Indications of incompatibility usually will appear within 5-15 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 1/2 to 3/4 pint WEEDONE® LV4 per acre for weeding and feeding corn, small grains, grasses for seed production or grass pastures as directed on this label. Use the fertilizer at rates recommended by supplier or Extension Service Specialist. Fill the spray tank about half full with the liquid fertilizer, then add the WEEDONE® LV4 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.

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GENERAL WEED LIST

ANNUAL AND BIENNIAL WEEDS

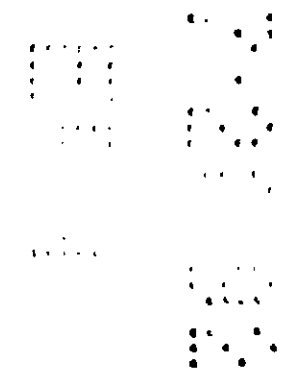
- | | |
|------------------------------------|--------------------------------|
| annual yellow sweetclover | pepperweeds (except perennial) |
| beggarticks* | pigweeds** (Amaranthus spp.) |
| bull thistle | prickly* lettuce |
| coffeeweed | ragweed (common giant) |
| common evening primrose | rough fleabane |
| common broomweed* | Russian thistle* |
| common burdock | salsify (western or common) |
| common cocklebur | smartweeds* (annual species) |
| common lambsquarters | sowthistle (annual or spiny) |
| croton (Texas or woolly) | sunflower |
| hairy galinsoga | velvetleaf |
| jimsonweed | vervains* |
| knotweed* | vetches |
| mallow* (venice, dwarf, little) | wild carrot* |
| marshelder | wild lettuce |
| morningglory (common, ivy, woolly) | wild parsnips |
| mustards (except blue mustard) | wild radish |

PERENNIAL WEEDS

- | | |
|-------------------------------------|-------------------------------|
| alfalfa* | healall |
| bindweed* (hedge, field & European) | hoary cress* |
| blue lettuce | Jerusalem - artichoke |
| Canada thistle* | many-flowered aster* |
| catnip | nettles* (including stinging) |
| chicory | plantains |
| dandelion | sowthistle (perennial) |
| docks* | tansy ragwort* |
| dogbanes* | vervains* |
| goldenrod* | western ironweed* |
| ground ivy* | wild garlic* |
| hawkweed* (orange) | wild onion* |

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

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



SPECIFIC USE DIRECTIONS

CEREAL GRAINS

WEEDS IN CROP	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
WHEAT, BARLEY and RYE (not underseeded with legumes) Postemergence Annual and biennial weeds Perennial broadleaf weeds	1/2 to 2 pints* 1 to 2 pints*	Apply after grain is fully tillered (usually about 4 to 8 inches high) but not forming joints in the stem. Do not spray grain in boot to dough stage.
Wild onion or garlic	1 1/2 to 2 pints*	Apply 1 1/2 pints when grain is fully tillered and wild garlic or onion plants are small. Apply 2 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	3 pints*	Apply when weeds are approaching bud stage, but do not spray grain during 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.
PREHARVEST	1 to 2 pints*	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.

RESTRICTIONS AND LIMITATIONS FOR USE ON SMALL GRAINS

- For aerial application on grain, a minimum of 2 or more gallons of water per acre is recommended.
- 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.

TANK MIXTURES FOR CEREAL GRAINS

WEEDONE LV-4 and BUCTRIL® Tank Mixture on Wheat, Barley and Rye

WEEDS IN CROP	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Cereal Areas except Washington, Oregon and Idaho	1/2 to 1 pint plus 1 to 1 1/2 pints BUCTRIL®	BUCTRIL® Broadleaf Herbicide will control some annual weeds that are resistant to WEEDONE® LV4 and may be tank mixed with WEEDONE® LV4 for broader spectrum weed control on small grains. TO PREPARE THE SPRAY: First mix WEEDONE® LV4 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 use 5 to 10 gallons total spray volume with air application. Use higher volume on larger weeds.
Washington, Oregon and Idaho	1/2 to 1 pint plus 1 1/2 to 2 pints BUCTRIL®	

*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.

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FIELD CORN

WEEDS	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Preplant	1 to 2 pints	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.
Preemergence	2 to 3 pints	To control broadleaf weeds and suppress annual grasses, apply 3 to 5 days after planting, but before corn emerges. Use high rate on soil high in organic matter. Do not use on light, sandy soil, or where soil moisture is inadequate for normal weed growth.
Postemergence Annual broadleaf weeds Perennial broadleaf weeds	1/2 pint 3/4 pint	Avoid spraying just after corn leaves unfold, as injury may occur. Apply when weeds are small and corn is less than 8 inches tall. If corn is more than 8 inches tall must be sprayed, use drop pipes. Spray when weeds are in the bud to bloom stage. If corn is more than 8 inches tall, use drop pipes to keep spray off corn leaves. Do not spray when corn is in tassel to dough stage. 2,4-D may make corn brittle. Winds or cultivation may cause stalk breakage while brittle.
Preharvest	1 to 2 pints	After the hard dough (denting) stage, to suppress weeds that interfere with harvest such as bindweed, cocklebur, dogbane, jimsonweed, ragweed, sunflower and velvetleaf, and to decrease production of weed seeds, spray with air or ground equipment. The high rate will be needed for tough weeds under stress.

RESTRICTIONS AND LIMITATIONS FOR USE ON FIELD CORN

Do not forage or feed corn fodder for 7 days following application.

GRAIN SORGHUM (milo)

WEEDS IN CROP	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Annual broadleaf weeds	3/4 pint	Treat when sorghum is 6 to 15 inches tall (to top of canopy). If sorghum is taller than 8 inches to top of canopy, use drop nozzles to keep spray off crop foliage. Do not treat during the boot, flowering or early dough stages.
Perennial broadleaf weeds	1 1/4 pints	

RESTRICTIONS AND LIMITATIONS FOR USE ON SORGHUM

Do not forage or feed fodder for 7 days following application.

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

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SOYBEANS (Preplant Only)

WEEDS	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Postemergence	3/4 to 1 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 GENERAL WEED LIST and below).
	1 to 2 pints	Apply not less than 30 days prior to planting soybeans, when weeds are actively growing. Some weeds may require repeat treatment for adequate control (see GENERAL WEED LIST and below).
		<p>In addition to those weeds found on the GENERAL WEED LIST, WEEDONE® LV4 will suppress or control the following broadleaf weeds frequently encountered in reduced tillage soybean production systems: bullnettle, smallflowered bittercress, Carolina geranium, smallflowered buttercup, common and rough cinquefoil, red clover*, horseweed or marehail, mousetail, wild mustard, field pennycress, cutleaf evening primrose, common purslane, speedwell, and Virginia copperleaf.</p> <p>* These weeds are only partially controlled.</p> <p>Apply no more than 2.0 pints of WEEDONE® LV4 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.</p> <p>If desired, WEEDONE LV4 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, Prowl, Pursuit Plus, Scepter, Scepter 70 DG, Squadron and others that are registered for pre-plant soybean use.</p> <p>NOTE: Unacceptable injury to soybeans planted in fields previously treated with WEEDONE® LV4 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 WEEDONE® LV4 application and the emergence of the soybean plant.</p>

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

- Do not apply WEEDONE® LV4 when weather conditions such as temperature, air inversions, or wind favor drift from treated areas to susceptible plants.
- Apply no more than 2.0 pints of WEEDONE® LV4 per acre in one season prior to planting soybeans.
- Do not apply WEEDONE® LV4 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 replant fields treated with WEEDONE® LV4 in the same growing season with crops other than those labeled for 2,4-D pre-plant use.
- Do not mow or cultivate weeds prior to treating with WEEDONE® LV4 as poor control may result.
- Do not cut for feed treated hay, forage, or fodder or graze treated soybeans to livestock.
- Only one application of WEEDONE® LV4 may be made prior to planting soybeans per growing season.
- Do not cut for feed or graze treated cover crops to livestock.

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GRASSES FOR SEED PRODUCTION

CROP	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Annual broadleaf weeds	1 to 1 1/2 pints	Apply to established stands in spring from tiller to early boot stage. Do not spray in boot stage. New spring seedlings may be treated with the lower rate after grass seedlings have at least 5 leaves. Perennial weed regrowth may be treated in the fall. DO NOT USE IN CALIFORNIA.
Perennial broadleaf weeds	2 to 3 pints	

SUGARCANE

CROP	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Preemergence	2 pints	Apply before canes appear for control of emerged broadleaf weeds. Apply after cane emerges and through layby. DO NOT USE IN CALIFORNIA.
Postemergence	2 to 4 pints	

WEEDS AND BRUSH IN PASTURES, RANGELAND, AND FALLOWLAND

CROP	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Established grasses and rangeland Annual broadleaf weeds	2 pints	Apply when weeds are small and actively growing and prior to bud stage. 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.
Perennial and biennial broadleaf weeds	3 to 4 pints	
Sand sage, sagebrush, shinnery oak and other 2,4-D susceptible woody species	1 to 4 quarts	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 more effective rate, volume and timing of spray applications.
FALLOWLAND AND CROP STUBBLE Annual broadleaf weeds	1 to 2 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. 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. 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. Apply to new regrowth of wild onion or garlic which occurs in the fall following harvest of small grains, soybeans, corn or grain sorghum.
Biennial broadleaf weeds	2 to 4 pints	
Perennial broadleaf weeds	2 to 6 pints	
Wild garlic and onion in crop stubble	4 to 6 pints	

RESTRICTIONS AND LIMITATIONS FOR USE ON PASTURES, RANGELAND, AND FALLOWLAND:

- 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 acre.
- Do not graze animals on treated areas within 7 days after treatment.
- Do not plant treated fallow land until 3 months after treatment or until chemical has disappeared from soil.
- Do not cut grass for hay within 30 days after application.
- Do not permit dairy animals or meat animals being finished for slaughter to forage treated fields within 3 days of slaughter.

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WEEDS IN ORNAMENTAL TURF AREAS

Golf Courses, Cemeteries, Parks, and other Turf Areas

WEEDS IN CROP	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 pints	Apply any time weeds are growing vigorously. Cool-season weeds such as common chickweed, henbit and pepperweeds should be sprayed when they appear in fall or early spring. Warm-season weeds such knotweed respond best when they are small. If there is additional germination, repeat treatment. Also controls cocklebur, galinsoga, lambquarters, pigweed, ragweed and sunflower.
Perennial and biennial broadleaf weeds	3 to 4 pints	To control dandelion, plantain and most other common broadleaf weeds in turf, apply in spring or fall when these weeds are growing actively. Treat wild garlic or onion in three successive seasons (Example: spring, fall, spring). Do not apply to newly seeded areas until sod is formed and grass has been cut at least twice. Do not use WEEDONE® LV4 for susceptible southern grasses such St. Augustine. Bentgrass and clover may injured by this treatment. Also controls bindweed, chicory, docks, ground ivy, hawkweed, thistles (Canada, musk, bull and Scotch), smartweed, tansy ragwort, wild onion and wild garlic.

RESTRICTIONS AND LIMITATIONS FOR USE IN TURF AREAS

For ground application in turf areas, use enough water for good coverage (minimum 10 gallons per acre).

Do not graze animals on treated areas within 7 days after treatment.

If needed, irrigate ornamental turf thoroughly before application. Spray when air is calm to avoid drift. Avoid treatment when temperatures exceed 85° F or are expected to do so within 24 hours after application.

WEEDS AND BRUSH IN NON-CROP AREAS

Fencerows, Roadsides, Drainage Ditchbanks, Vacant Lots, Airfields, Railroad, Highway And Utility Rights-Of-Way, And Other Non-Crop Areas.

WEEDS	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 to 4 pints	Apply when most weeds are still young and growing vigorously.
Perennial and biennial broadleaf weeds	3 to 6 pints	Apply when weeds are actively growing and near the bud stage, but before flowering. For best results on tansy ragwort and musk thistle, treat 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 1/2 to 2 1/2 gallons	Mix 2 quarts WEEDONE® LV4 in 2 quarts kerosene or diesel oil then add this mixture to 100 gallons of water. Apply 300 to 500 gallons of spray per acre, depending on the stand. The addition of a wetting agent is suggested.
Woody plants	1 to 2 gallons	Apply in 30 to 100 gallons of spray per acre, preferably through low-volume equipment such as DIRECTA-SPRA™, WOBBLER™, MINI-WOBBLER™ or SPIROMETER™. Treat when 2,4-D susceptible species are in full leaf and growing actively. Repeated applications, oil or wetting agent, and/or high volume spraying (300 to 500 gallons of spray per acre) may be needed for complete control of some species or if brush growth is dense.

RESTRICTIONS AND LIMITATIONS FOR USE IN NON-CROP AREAS

For aerial application to solid stands of susceptible brush, use 2 to 4 quarts in 3 to 12 gallons volume per acre. Two 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.

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TANK MIXTURES FOR NON-CROP AREAS

WEEDONE® LV4 And GARLON¹ 4 Or GARLON 3A Tank Mixtures For Non-Crop Areas

WEEDS	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Broadleaf weed control	2 to 4 pints WEEDONE® LV4 plus 2 to 6 pints Garlon-4 or 3 to 8 pints Garlon-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	1 to 2 gallons WEEDONE® LV4 plus 1 1/2 to 3 quarts Garlon-4 or 2 to 4 quarts Garlon-3A	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	1 to 8 quarts WEEDONE® LV4 plus 1 1/2 to 12 pints Garlon-4 or 2 to 16 pints GARLON-3A	Mix 1 to 2 quarts WEEDONE® LV4 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 of 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)	1 to 2 gallons WEEDONE® LV4 plus 3 to 4 quarts Garlon-4 or 4 to 6 quarts Garlon-3A	Apply in a total spray volume of 10 to 30 gallons per acre using drift control equipment such as the MICRO-FOIL® boom or an effective drift control agent. Use the higher rates and volumes when plants are dense or under drought conditions.

WEEDONE® LV4 And BANVEL² Herbicide Tank Mixtures For Non-Crop Areas

WEEDS	AMOUNT OF WEEDONE® LV4 PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 to 4 pints WEEDONE® LV4 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	3 to 6 pints WEEDONE® LV4 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 biennial 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	1 to 2 gallons WEEDONE® LV4 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 agent. Use the higher rates and volumes when plants are dense or under drought conditions.

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12 x 12

SMALL AREA APPLICATIONS FOR NON-CROP USE

For control of broadleaf weeds in small non-crop areas with hand held or back-pack sprayers mix 4 fluid ounces WEEDONE® LV4 per gallon of water. Thoroughly wet all weed foliage. Maintain agitation of mixture to prevent separation.

FOREST MANAGEMENT

CONIFER RELEASE

To control alder, apply 1 1/2 to 2 quarts WEEDONE® LV4 Broadleaf Postemergence Herbicide in 9 1/2 to 15 gallons water per acre as a foliage spray. 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 3 quarts WEEDONE® LV4 plus 3 quarts fuel oil in 8 1/2 to 15 gallons water per acre before new growth on Douglas fir is 2" long. To control manzanita and ceanothus in ponderosa pine, apply 3 quarts WEEDONE® LV4 before pine growth begins in spring.

To control hazel brush in the Lake states, apply 2 quarts WEEDONE® LV4 in 1 1/2 to 4 1/2 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 1/2 to 3 quarts of WEEDONE® LV4 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 2 to 4 quarts WEEDONE® LV4 in 9 to 15 gallons 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 2 quarts WEEDONE® LV4 plus 2 quarts fuel oil in 9 to 15 of gallons 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.

LIMITED WARRANTY AND DISCLAIMER

The manufacturer warrants that this product conforms to the chemical description on the label; that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions; and that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants, and of residues on food crops and upon reports of field experience. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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