UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

71368-14

1/27/2000

Mr. William M. Mahlburg Nufarm, Inc.

1009-D West Maartens Dr.

St. Joseph, MO 64506

JAN 27 2000

Dear Mr. Mahlburg:

Subject:

)

1

Label Amendment Extending 2,4-D Use in Reduced or No-Tillage Soybeans

(Pre-plant Only)

Weedar® LV4 Solventless Broadleaf Herbicide

EPA Reg. No. 71368-14

Your Application Dated October 23, 1999

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, 2001. In addition, during the period that this amendment is effective, it will be subject to the conditions listed below:

- This acceptance is based on your certification that the submitted labeling on preplant soybean use is an exact copy of the labeling accepted by the Agency on March 15, 1996. Please note that the acceptance of this labeling pertains to the previously approved preplant soybean use only and does not signify the acceptance of any other labeling revisions. No other label revisions are being reviewed or considered with this action. You should also note that if you fail to satisfy the conditions imposed in this certification, EPA may issue a notice to cancel this amendment under FIFRA section 6(e).
- This conditional registration will expire automatically on December 31, 2001. Sale or distribution of the subject product bearing labeling for this use on reduced or no-tillage soybeans (pre-plant only) after December 31, 2001 will be illegal. The tolerance authorizing residues of the subject product will also expire on December 31, 2001. 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.

			co	NCURRENCES	 	
SYMBOL +	7505C					
SURNAME >	MHoward					!
DATE >	Jan 27, 2000	,			,	

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

3) Finally, if and when a permanent tolerance is established, EPA will entertain an application to amend the registration of the subject product without any special limitations on the duration of the amendment.

A stamped copy of the labeling is enclosed for your records. Please submit one (1) copy of your final printed labeling before you release the product for shipment.

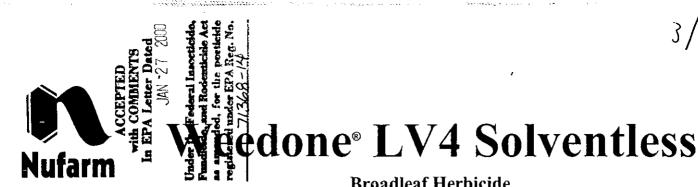
Sincerely yours,

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

Enclosure

,

)



Broadleaf Herbicide

SOLVENTLESS **ESTER FORMULATION FOR CONIFER AGRICULTURAL** WEED CONTROL. RELEASE, SITE PREPARATION, TURF AND NON-CROPLAND WEED CONTROL.

ACTIVE INGREDIENT:

2,4-Dichlorophenoxyacetic acid, isooctyl	
(2-ethylhexyl) ester	62.6%*
INERT INGREDIENTS:	37.4%
TOTAL:	100.0%

*2.4-Dichlorophenoxyacetic acid equivalent 41.5% or 3.8 lbs. per gallon, Isomer specific by AOAC Method No. 978.05

KEEP OUT OF REACH OF CHILDREN **CAUTION**

See Below For Additional Precautionary Statements

EPA REG. NO. 71368-14 EPA EST. NO. _____

NET CONTENTS GALS. (L)

09/97

For Chemical Spill, Leak, Fire, or Exposure, Call CHEMTREC (800) 424-9300

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

If on skin: Wash skin with plenty of soap and water, if available. Get medical attention.

If in eyes: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Get medical attention if irritation persists.

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.

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through the skin or inhaled. Avoid breathing vapors or spray mist. Do not get in eyes, on skin or on clothina.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and protective eve wear.

For containers over 1 gallon but less than 5 gallons, mixers and loaders who do not use a mechanical system (probe and pump) to transfer the contents of this container must wear coveralls or a chemical-resistant apron in addition to the other required PPE.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it has been cleaned.

ENGINEERING CONTROL STATEMENTS:

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.

For containers of 5 gallons or more, a mechanical system (probe and pump) must be used for transferring the contents of the container. If the contents of a non-refillable pesticide containers are emptied, the probe must be rinsed before removal. If the mechanical system is used in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)] the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates. Drift or runcif may adversely affect aquatic invertebrates 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 Solventless Broadleaf 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 Solventless Broadleaf Herbicide sprays or spray drift may be killed or suffer significant stand loss with extensive quality and yield reduction.

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 tips; (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 label. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal

protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow 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; waterproof gloves; shoes plus socks; and protective eyewear.

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 (WPS) 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 allow people (other than applicator) or pets on treatment area during application.

Do not enter treatment areas until sprays have dried.

STORAGE AND DISPOSAL

STORAGE: Do not contaminate water, fcod 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 incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

GENERAL INFORMATION

WEEDONE® LV4 Solventless Broadleaf Herbicide contains the isooctyl (2-ethylhexyl) ester of 2,4-D, the original and one of the best low volatile esters. In cropland, WEEDONE® LV4 Solventless Broadleaf Herbicide 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 SCME 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 Solventless Broadleaf Herbicide 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 Solve-tiess Broadleaf 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 Solventless Broadleaf Herbicide 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 Solventless Broadleaf 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 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 Solventless Broadleaf Herbicide per acre for weeding and feeding corn, cereal 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 Solventless Broadleaf Herbicide 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.

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 iimsonweed vervains*

vetches knotweed*

mallow* (venice, dwarf, little) marshelder wild lettuce

morningglory (common. ivy, wild parsnips

woolly)

mustards (except blue mustard) wild radish

PERENNIAL WEEDS

alfalfa* healall bindweed* (hedge, field & hoary cress*

European)

wild carrot*

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

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

SPECIFIC USE DIRECTIONS

CEREAL GRAINS

	AMOUNT OF	,
	WEEDONE®	
	LV4	
WEEDS IN CROP	SOLVENTLESS	DIRECTIONS
	PER ACRE	į
WHEAT,		Apply after grain is
BARLEY and		fully tillered (usually
RYE (not		about 4 to 8 inches
underseeded		high) but not forming
with legumes		joints in the stem. Do
Postemergence		not spray grain
Annual and biennial	4.00 (0 1 6 +	in boot to dough
weeds	1/2 to 2 pints*	stage.
Perennial broadleaf	1 to 2 pints*	
weeds		
Wild onion or	1 1/2 to 2 pints*	Apply 1 1/2 pints
garlic		when grain is fully tillered and wild garlic
		or onion plants are
		small. Apply 2 pints
i		after harvest in the
		crop stubble. For
		control of new fall
		growth of wild onion or
		garlic refer to
		FALLOWLAND use
		directions.
Preharvest	1 to 2 pints*	Apply when grains are
ļ		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
1		weed growth.

^{*} 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.

RESTRICTIONS AND LIMITATIONS FOR USE ON CEREAL GRAINS

For aerial application on grain, apply WEEDONE® LV4 Solventless Broadleaf Herbicide 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 as described above is applied.

TANK MIXTURES FOR CEREAL GRAINS WEEDONE® LV4 SOLVENTLESS BROADLEAF HERBICIDE and BUCTRIL® Tank Mixture on Wheat, Barley and Rye

	AMOUNT OF	
	WEEDONE®	
	LV4	
WEEDS IN CROP	SOLVENTLESS PER ACRE	DIRECTIONS
except Washington, Oregon, Idaho, Colorado, Wyoming and Montana Washington, Oregon, Idaho, Colorado, Wyoming and Montana	1/2 to 1 pint plus 1 to 1 1/2 pints BUCTRIL® 1/2 to 1 pint plus 1 1/2 pints BUCTRIL®	BUCTRIL® Broadleaf Herbicide will control some annual weeds that are resistant to WEEDONE® LV4 Solventless Broadleaf Herbicide and may be tank mixed with WEEDONE® LV4 Solventless Broadleaf Herbicide for broader spectrum weed control on cereal grains. TO PREPARE THE SPRAY: First mix WEEDONE® LV4 Solventless Broadleaf Herbicide 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.

FIELD	CORN
-------	------

	FIELD CORN					
	AMOUNT OF					
	WEEDONE [®]					
	LV4					
WEEDS	SOLVENTLESS	DIRECTIONS				
	PER ACRE					
Preplant	1 to 2 pints	To control emerged				
i	1 to 2 pinto	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				
Proome	2 to 4 = := t=	alfalfa.				
Preemergence	2 to 4 pints	To control broadleaf				
		weeds and suppress				
		annual grasses, apply 3				
		to 5 days after planting,				
		but before com 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				
Post-		weed growth.				
		Augid apposing just offer				
emergence		Avoid spraying just after				
Annual broadleaf weeds	1/2 nint	corn leaves unfold, as				
weeds	1/2 pint	injury may occur. Apply when weeds are small				
		and com is less than 8				
Perennial broadleaf	3/4 pint	inches tall. If corn is more than 8 inches tall must be				
weeds	3/4 pint	sprayed, use drop pipes.				
wccus		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 com				
		leaves. Do not spray				
,		when corn is in				
·						
		stage. 2,4-D may make				
		corn brittle. Winds or				
'	_	cultivation may cause				
		stalk breakage while				
	L	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.

POPCORN*

WEEDS IN CROP	AMOUNT OF WEEDONE® LV4 SOLVENTLESS PER ACRE	DIRECTIONS
Preharvest	1 to 2 pints	After the dent 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 weeds under stress. DO NOT USE IN CALIFORNIA.

RESTRICTIONS AND LIMITATIONS FOR USE ON FIELD CORN AND POPCORN

Do not forage or feed corn fodder for 7 days following application. A minimum application volume of 3 to 5 gallons per acre by air or 10 gallons per acre by ground is recommended.

Note: Hybrids vary in response to 2,4-D and some are easily injured. Contact seed company or your Agricultural Experiment Station or Extension weed specialists for this information.

*Not currently registered in California.

SOYBEANS*	(Preplant	Only)
-----------	-----------	-------

	SOIBEANS (FI	cplant Omy)
	AMOUNT OF	
	WEEDONE®	
	LV4	
WEEDS	SOLVENTLESS	DIRECTIONS
	PER ACRE	
Post-	3/4 to 1 pint	Apply not loss than 7 days
i) 3/4 to 1 pint	Apply not less than 7 days prior to planting soybeans,
emergence		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,
i		when weeds are actively
	'	growing. Some weeds may
		require repeat treatment for
	:	adequate control (see
	i	GENERAL WEED LIST and
		below).
		In addition to those weeds found on the GENERAL WEED
		_
		LIST, WEEDONE® LV4
		Solventless Broadleaf Herbicide will suppress or
1		Herbicide will suppress or control the following broadleaf
		weeds frequently encountered
		in reduced tillage soybean
		production systems: bullnettle,
		smallflowered bittercress,
		Carolina geranium,
1		smallflowered buttercup,
		common and rough cinquefoil,
		red clover*, horseweed or
		marestail, mousetail, wild
		mustard, field pennycress,
		cutleaf evening primrose,
		common pursiane, speedwell,
		and Virginia copperleaf.
		* These weeds are only
		partially controlled.

Apply no more than 2.0 pints of WEEDONE® LV4 Solventless Broadleaf 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, WEEDONE® LV4 Solventless Broadleaf Herbicide may be applied preplant to soybeans in tank mixtures with other herbicides such as Poast®, Poast Plus®. Roundup®, Roundup Pak®, Honcho®, Gramoxone Extra®. Prowl®. Pursuit Plus®, Scepter®, Scepter 70 DG, Squadron® and others that are registered for pre-plant sovbean use. NOTE: Unacceptable injury to soybeans planted in fields previously treated WEEDONE® LV4 Solventless Broadleaf 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 WEEDONE® LV4 Broadleaf Solventiess Herbicide application and the

emergence of the soybean

RESTRICTIONS AND LIMITATIONS FOR USE IN SOYBEANS (Preplant)

plant.

Do not apply WEEDONE® LV4 Solventless Broadleaf Herbicide 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 Solventless Broadleaf Herbicide per acre in one season prior to planting Joybeans.

Do not apply WEEDONE® LV4 Solventless Broadleat Herbicide 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 $^\circledR$ LV4 Solventless Broadleaf Herbicide 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 Solventless Broadleaf Herbicide 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 Solventless Broadleaf Herbicide may be made prior to planting soybeans per growing season. Do not cut for feed or graze treated cover crops to livestock.

GRAIN SORGHUM (Milo)

WEEDS IN CROP	AMOUNT OF WEEDONE® LV4 SOLVENTLESS PER ACRE	DIRECTIONS
Annual broadleaf weeds Perennial	1/2 pint	Treat when sorghum is 5 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
broadleaf weeds	3/4 – 1 pint	foliage. Do not treat during the boot, flowering or early dough stages.

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.

GRASSES FOR SEED PRODUCTION

CROP	AMOUNT OF WEEDONE® LV4 SOLVENTLESS 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
Perennial broadleaf weeds	2 to 3 pints	seedlings have at least 5 leaves. Perennial weed regrowth may be treated in the fall. DO NOT USE IN CALIFORNIA.

SUGARCANE

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

WEEDS AND BRUSH IN PASTURES, RANGELAND, AND FALLOWLAND

	AMOUNT OF WEEDONE®	
CROP	LV4 SOLVENTLESS PER ACRE	DIRECTIONS
Established grasses and rangeland Annual broadleaf weeds Perennial and biennial broadleaf weeds	2 pints 3 to 4 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
Sand sage, sagebrush, shinnery oak and other 2,4-D susceptible woody species	4 pints	treatment. 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.

^{*}Not currently registered in California.

EALL OWN AND		I los des la company
FALLOWLAND		Use the lower rate when
AND CROP		weeds are small (2 to 3
STUBBLE		inches tall) and growing
Annual broadleaf	1 to 2 pints	actively. Use the higher
weeds		rate on older and
		drought-stressed plants.
Biennial broadleaf		Spray while musk thistles
weeds	2 to 4 pints	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		Spray weeds in bud to
weeds	2 to 6 pints	bloom stage, or in good
,	,	vegetative growth. Do not
1		disturb treated area for at
		least 2 weeks after
		treatment, or until weed
		tops are dead.
Wild garlic and		Apply to new regrowth of
onion in crop	4 to 6 pints	wild onion or garlic which
stubble	'	occurs in the fall
1		following harvest of
		cereal grains, soybeans,
		corn or grain sorghum.

44-44-4 (4-25-445).

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 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.

WEEDS IN ORNAMENTAL TURF AREAS Golf Courses, Cemeteries, Parks, and other Turf Areas

	AMOUNT OF	
]	WEEDONE®	
	LV4	
WEEDS IN	SOLVENTLESS	DIRECTIONS
CROP	PER ACRE	
Annual	2 pints	Apply any time weeds are
broadleaf		growing vigorously. Cool-
weeds		season weeds such as common
		chickweed, henbit and pepperweeds should be
		sprayed when they appear in fall
1		or early spring. Warm-season
		weeds such knotweed respond
•		best when they are small. If
		there is additional germination,
		repeat treatment. Also controls
1		cocklebur, galinsoga,
		lambquarters, pigweed,
Perennial	3 to 4 pints	ragweed and sunflower. To control dandelion, plantain
and	3 to 4 pints	and most other common
biennial		broadleaf weeds in turf, apply in
broadleaf		spring or fall when these weeds
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
ĺ		is formed and grass has been
		cut at least twice. Do not use
	}	WEEDONE® LV4 Solventless
		Broadleaf Herbicide for
		susceptible southern grasses
		such St. Augustine. Bentgrass
		and clover may be 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

Do not allow people (other than applicator) or pets on treatment area during application. Do not enter treatment areas until spray has dried or dust has settled.

The maximum number of broadcast applications per treatment site is 2 per year. This does not exclude spot treatment.

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 No	n-Crop Areas.
-------------------	---------------

	AMOUNT OF	-
	WEEDONE® LV4	
WEEDS	SOLVENTLESS 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	4 pints	Mix 2 quarts WEEDONE® LV4 Solventless Broadleaf Herbicide 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	6 to 8 pints	Apply in 30 to 100 gallons of spray per acre, preferably through low-volume equipment such as DIRECTA-SPRA MINI-WOBBLER OF SPIROMETER OF SPIRO
-----------------	--------------	--

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.

TANK MIXTURES FOR NON-CROP AREAS

WEEDONE® LV4 SOLVENTLESS BROADLEAF HERBICIDE And GARLON® 4 or GARLON 3A Tank Mixtures For Non-Crop Areas

Mixtures For Non-Crop Areas		
	AMOUNT OF	
	WEEDONE®	
· · · · · · · · · · · · · · · · · · ·	LV4	
WEEDS	SOLVENTLESS	DIRECTIONS
	PER ACRE	
Broadleaf	2 to 4 pints	For wider spectrum control of
weed	WEEDONE® LV4	broadleaf weeds and woody
control	SOLVENTLESS	plants:
Į.	plus	Apply as a broadcast spray in
	2 to 6 pints	enough water to deliver 20 to
	Garlon-4	100 gallons total spray per
	or 3 to 8 pints	acre. Apply when broadleaf
	Garlon-3A	weeds are actively growing.

Tar T		
Woody	1 to 2 gallons	Apply as a broadcast spray in
plant	WEEDONE® LV4	enough water to deliver 20 to
control	SOLVENTLESS	100 gallons total spray per
Broadcast	plus	acre. Apply when woody
foliar spray	1 1/2 to 3 quarts	plants are actively growing.
ļ .	Garlon-4	
] !	or 2 to 4 quarts	}
	Garlon-3A	
Woody	1 to 8 quarts	Mix 1 to 2 quarts WEEDONE®
plant	WEEDONE® LV4	LV4 Solventless Broadleaf
control	SOLVENTLESS	Herbicide plus 1 1/2 to 3 pints
High volume	plus	Garlon-4 or 2 to 4 pints
leaf-stem	1 1/2 to 12 pints	Garlon-3A in enough water to
treatment	Garlon-4	make 100 gallons of spray.
with ground	or 2 to 16 pints	Apply at a volume of 100 to
equipment	GARLON-3A	400 gallons of total spray per
		acre depending on size and
1		density of woody plants.
		Thoroughly wet all leaves,
		stems and root collars of
		plants to be controlled.
Woody	1 to 2 gallons	Apply in a total spray volume
plant	WEEDONE® LV4	of 10 to 30 gallons per acre
control	SOLVENTLESS	using drift control equipment
Aerial	plus	such as the MICRO-FOIL®
application	3 to 4 quarts	boom or an effective drift
(helicopter	Garlon-4	control agent. Use the higher
only)	or 4 to 6 quarts	rates and volumes when
	Garlon-3A	plants are dense or under
		drought conditions.

WEEDONE® LV4 SOLVENTLESS BROADLEAF HERBICIDE and BANVEL® HERBICIDE Tank Mixtures For Non-Crop Areas

WEEDS	AMOUNT OF WEEDONE® LV4 SOLVENTLESS PER ACRE	DIRECTIONS
Annual broadleaf weeds	2 to 4 pints WEEDONE® LV4 SOLVENTLESS 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 SOLVENTLESS plus 1/2 to 6 pints Banvel	Apply as a broadcast spray in enough water to deliver 20 to 100 gallons total spray per acre. Apply when broadleaf weeds are actively growing but prior to flowering. Use the lower rates for biennials less than 3 inches rosette diameter. Use the higher rates for perennial weeds or for biennial weeds past the 3-inch rosette stage.
Woody plant control Broadcast, high volume, stem foliage or aerial application	1 to 2 gallons WEEDONE® LV4 SOLVENTLESS 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.

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 Solventless Broadleaf 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 1 1/2 to 2 quarts WEEDONE® LV4 Solventless Broadleaf 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 soruce or grand fir, apply 3 quarts WEEDONE® LV4 Solventless Broadleaf Herbicide plus 3 quarts fuel oil in 8 1/2 to 15 gallons water per acie before new growth on Douglas fir is 2" long. To control manzanita and ceanothus in ponderosa pine, apply 3 quarts WEEDONE® LV4 Solventless' Broadleaf Herbicide before pine growth begins in spring.

To control hazel brush in the Lake states, apply 2 quarts WEEDONE® LV4 Solventless Broadleaf Herbicide 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 1/2 to 3 quarts of WEEDONE® LV4 Solventiess Broadleaf Herbicide 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 Solventless Broadleaf Herbicide 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 Solventless Broadleaf Herbicide 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.

*Not currently registered in California.

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.

THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR. ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS, OR CAUTIONS.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

NOTICE TO BUYER

Purchase of this material does not confer any rights under patents governing this product or the use thereof in countries outside of the United States.

Manufactured by Nufarm, Inc. 1009-D West St. Maartens Dr. St. Joseph, MO 64506

Garlon® is a Registered Trademark of Dow AgroSciences.

Gramoxone Extra® is a Registered Trademark of a Zeneca Group Company.

Banvel®, Poast® and Poast Plus® are Registered Trademarks of BASF Corp.

Prowl®, Pursuit Plus®, Scepter® and Squadron® are Registered Trademarks of American Cvanamid Co.

Roundup®, Roundup D-Pak® and Honcho® are Registered Trademarks of Monsanto Co.

Weedone® is a Registered Trademark of Nufarm, Inc.

Micro-Foil®, Directa-Spray®, Wobbler®, Mini Wobbler®, Spirometer® and Buctril® are Registered Trademarks of Rhone-Poulenc.