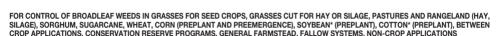


2.4-D DMA 2.4-D MMA GROUP 4 HERRICIDE DICAMBA DGA

# WeedMaster® XHL **HERBICIDE**



Active Ingredients:	% by Weight
Dimethylamine salt of 2,4-dichlorophenoxyacetic acid*	35.47%
Monomethylamine salt of 2,4-dichlorophenoxyacetic acid*	8.40%
Diglycolamine salt of 3,6-dichloro-o-anisic acid (dicamba)*	*18.11%
Other Ingredients	38.02%
TOTAL	100 000/

\*This product contains a total of 3.75 lb 2.4-D acid equivalent per gallon or 36.8% by weight

\*\*This product contains 1.25 lb Dicamba acid equivalent per gallon or 12.3% by weight

# KEEP OUT OF REACH OF CHIL

(If you do not understand the label, find someone to explain it to you in detail.) SEE INSIDE BOOKLET FOR PRECAUTIONARY STATEMENTS AND DIRECTIONS FOR USE

For Medical Emergencies, Call (877) 325-1840 For Chemical Spill, Leak, Fire or Exposure, Call CHEMTREC (800) 424-9300

#### FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. IF SWALLOWED: Immediately call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Ringe skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information. NOTE TO PHYSICIAN: This product contains a phenoxy herbicidal chemical. There is no specific antidote. All treatments should be based on observed signs and symptoms of distress in the patient. Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Reg. No. 71368-139

\*Not Registered for Use by California

Manufactured for Nufarm, Inc. 11901 S. Austin Avenue Alsip, IL 60803





**Net Contents** 2.5 Gal. (9.46 L) Nonrefillable Container

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

# **DANGER / PELIGRO**

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

- · Long-sleeved shirt and long pants
- · Shoes and socks
- Protective evewear (goggles or face shield)
- Chemical resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) 14 mils, or Viton ≥ 14 mils (except for applicators using groundboom equipment, pilots, and flaggers)
- · Chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow the 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.

See engineering controls for additional requirements.

#### **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. 607(d-f)], the handler PPE requirements may be reduced or modified as specified in the WPS. Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.607(f)].

#### 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 and may adversely affect non-target plants.

For terrestrial uses, except when applying aerially over the forest canopy: Do not apply directly to water, or 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 washwater or rinsate.

This product contains chemicals with 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.

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.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come in contact with any oxidizing agent. Hazardous chemical reaction may occur.

# **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.

Do not apply this product in a way that will contact workers or other persons, either directly or through spray 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. Unless otherwise directed in supplemental labeling, all applicable directions, restrictions, and precautions are to be followed. Labeling must be in the user's possession during application.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 48 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 worn over short-sleeved shirt and short pants
- . Chemical-resistant footwear plus socks
- Chemical resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils. or Viton ≥ 14 mils
- · 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 for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not enter or allow people (or pets) to enter the treated area until sprays have dried.

#### WEED RESISTANCE MANAGEMENT

For resistance management, this product contains Group 4 herbicides 2,4-D and dicamba. Any weed population may contain or develop plants naturally resistant to this product and other Group 4 herbicides. Appropriate resistance management strategies should be followed.

When herbicides that affect the same biological site of action are used repeatedly over several years to control the same weed species in the same field, naturally-occurring resistant biotypes may survive a correctly applied herbicide treatment, propagate, and become dominant in that field. Adequate control of these resistant weed biotypes cannot be expected. If weed control is unsatisfactory, it may be necessary to retreat the problem area using a product affecting a different site of action.

To delay herbicide resistance, take one or more of the following steps:

- Rotate the use of this product or other Group 4 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species
  is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistanceprone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently
  less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to
  herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding
  rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or
  varieties) and other management practices.
- Scout before and after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

It is advisable to keep accurate records of pesticides applied to individual fields to help obtain information on the spread and dispersal of resistant biotypes. Contact your local sales representative, crop advisor, or extension agent to find out if suspected resistant weeds to this MOA have been found in your region. Do not assume that each listed weed is being controlled by this mechanism of action. Co-formulated active ingredients are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product.

#### PRODUCT INFORMATION

This product is a selective postemergence herbicide for controlling a wide spectrum of annual, biennial, and perennial broadleaf weeds and brush in grass forages and selected row crops.

#### Mode of Action

This product contains two active ingredients: dicamba and 2,4-D. This herbicide is readily absorbed by plants through shoot and root uptake, translocates throughout the plant's system, and accumulates in areas of active growth. This product interferes with the plant's growth hormones (auxins) resulting in death of many broadlest weeds.

#### Cleaning Spray Equipment

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's direction and then triple rinsing the equipment before and after applying this product.

#### APPLICATION PROCEDURES

Apply this product at the rates and growth stages listed in Tables 1 and 2 as follows unless instructed differently by Food/Feed Crop Specific Information or Non-Food/Feed Use Specific Information. Applications can be made to actively growing weeds as aerial, broadcast, band, or spot spray applications. This product may be applied using water or sprayable fluid fertilizer as a carrier. Sprayable fluid fertilizer may be used as the carrier in preplant or pre-emergence uses for all crops listed on this label. Postemergence uses with sprayable fluid fertilizer may be made on pasture, havland, or wheat crops only.

The most effective application rate and timing varies based on the target weed species (refer to Table 1). In mixed populations of weeds the correct rate is determined by the weed species requiring the highest rate. Delaying application permits weeds to exceed the maximum size stated and will prevent adequate control.

#### IRRIGATION

In irrigated areas, it may be necessary to irrigate before treatment to ensure active weed growth.

#### SPRAY COVERAGE

Weeds must be thoroughly covered with spray. Dense leaf canopies shelter smaller weeds and can prevent adequate spray coverage.

#### 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. To prevent spray 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 (ASABE 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 (ASABE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

### Wind Speed

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

#### Temperature Inversions

If applying at wind speeds less than 3 mph, the applicator must determine if:

a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

#### Susceptible Plants

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

#### Other State and Local Requirements

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

#### Equipment

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

#### Additional requirements for aerial applications:

The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications.

When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

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

TABLE 1. APPLICATION RATE AND TIMING - ANNUAL WEEDS

Kochia         -         1 to 6"         6 to 10"         10 to 20"         -         actively growing           Lambsquarters, Common         -         1 to 6"         6 to 10"         10 to 20"         -         actively growing           Mallow, Common         -	Weeds Controlled		WeedMaster® XF				)
Beebalm, Spotled							
Broomweed	Amaranth, Palmer	-	< 3"	3 - 10"	-	-	-
Buckwheat, Wild	Beebalm, Spotted	-	-	-	pre-bloom	postbloom	-
Buffalobur	Broomweed	1 to 3"	3" branching	-	branching	-	after branching
Burdock - pre-flower - early bloom late bloom - Chickweed, Common - seedling 1 to 3"	Buckwheat, Wild	-	1 to 6"	-	-	-	-
Buttercup	Buffalobur	-	-	-	1 to 6"	-	flowering
Chickweed, Common   Cockle, Cow   Cockle, Cockle	Burdock	-	pre-flower	-	-	-	-
Cockle, Cow         -         <3"         -         <	Buttercup	-	pre-flower	-	early bloom	late bloom	-
Cocklebur, Common         -         1 to 6"         6 to 12"         12 to 18"         -         -           Coreopsis, Plains         -         1 to 6"         -         -         -         -           Croton, Woolly         1 to 4"         4 to 12"         12 - 30"         -         -         -           Cudweed         -         rosette         -	Chickweed, Common	-	seedling	1 to 3"	-	-	-
Coreopsis, Plains         -         1 to 6"         -	Cockle, Cow	-	< 3"	-	-	-	-
Croton, Woolly         1 to 4"         4 to 12"         12 -30"         -         -         -           Cudweed         -         rosette         - </td <td>Cocklebur, Common</td> <td>-</td> <td>1 to 6"</td> <td>6 to 12"</td> <td>12 to 18"</td> <td>-</td> <td>-</td>	Cocklebur, Common	-	1 to 6"	6 to 12"	12 to 18"	-	-
Cudweed         -         rosette         -         <	Coreopsis, Plains	-	1 to 6"	-	-	-	-
Devils-claw	Croton, Woolly	1 to 4"	4 to 12"	12 -30"	-	-	-
Dogfennel   -   -   -   10 to 15"   -   -	Cudweed	-	rosette	-	-	-	-
Evening Primrose	Devils-claw	-	-	-	< 8"	-	-
Flax - <2"	Dogfennel	-	-	-	10 to 15"	-	-
Fleabane, Annual	Evening Primrose	-	< 2"	-	2 to 6"	-	-
Flixweed   -	Flax	-	< 2"	-	-	-	-
Hairy Bittercress	Fleabane, Annual	-	1 to 4"	4 to 8"	8"	-	-
Henbit	Flixweed	-	< 3"	-	-	-	-
Notweed Spp.   -	Hairy Bittercress	-	1 to 6"	6 to 10"	-	-	-
Kochia         -         1 to 6"         6 to 10"         10 to 20"         -         actively growing           Lambsquarters, Common         -         1 to 6"         6 to 10"         10 to 20"         -         actively growing           Mallow, Common         -          -	Henbit	-	-	preflower	-	flower	-
Lambsquarters, Common         -         1 to 6"         6 to 10"         10 to 20"         -         actively growing           Mallow, Common         -         <3"	Knotweed Spp.	-	< 3" runners	-	> 3" runners	-	actively growing
Mallow, Common         -         <3"	Kochia	-	1 to 6"	6 to 10"	10 to 20"	-	actively growing
Marestail (Horseweed)         -         -         rosette to 3"         3 to 6"         -         -           Mayweed         -         -         -         1 to 6"         -         -           Morningglory, Ivyleaf         -         pre-flower         -         -         -         -           Morningglory, Tall         -         pre-flower         -         post-flower         -         -           Mouse-ear Cress         -         rosette         -         -         -         -           Mustard, Annual         -         rosette         -         early bolt         -         -           Mustard, Tansy         -          -         -         -         -           Pennycress, Field         -         -         -         -         -         -           Pepperweed, Virginia         -         -         1 to 3"         3 to 6"         after branching         -	Lambsquarters, Common	-	1 to 6"	6 to 10"	10 to 20"	-	actively growing
Mayweed         -         -         -         1 to 6"         -         -           Morningglory, Ivyleaf         -         pre-flower         -         -         -         -           Morningglory, Tall         -         pre-flower         -         post-flower         -         -           Mouse-ear Cress         -         rosette         -         -         -         -           Mustard, Annual         -         rosette         -         early bolt         -         -           Mustard, Tansy         -          3"         -         -         -           Pennycress, Field         -         -         rosette         -         -         -           Pepperweed, Virginia         -         -         1 to 3"         3 to 6"         after branching         -	Mallow, Common	-	< 3"	-	-	-	-
Morningglory, Ivyleaf         -         pre-flower         - <td< td=""><td>Marestail (Horseweed)</td><td>-</td><td>-</td><td>rosette to 3"</td><td>3 to 6"</td><td>-</td><td>-</td></td<>	Marestail (Horseweed)	-	-	rosette to 3"	3 to 6"	-	-
Morningglory, Tall         -         pre-flower         -         post-flower         -         -           Mouse-ear Cress         -         rosette         -         -         -         -           Mustard, Annual         -         rosette         -         early bolt         -         -           Mustard, Tansy         -          3"         -         -         -           Pennycress, Field         -         -         rosette         -         -           Pepperweed, Virginia         -         1 to 3"         3 to 6"         after branching         -	Mayweed	-	-	-	1 to 6"	-	-
Mouse-ear Cress         -         rosette         -	Morningglory, Ivyleaf	-	pre-flower	-	-	-	-
Mustard, Annual         -         rosette         -         early bolt         -         -           Mustard, Tansy         -         < 3"	Morningglory, Tall	-	pre-flower	-	post-flower	-	-
Mustard, Tansy         -         <3"	Mouse-ear Cress	-	rosette	-	-	-	-
Pennycress, Field         -         -         rosette         -           Pepperweed, Virginia         -         1 to 3"         3 to 6"         after branching         -	Mustard, Annual	-	rosette	-	early bolt	-	-
Pepperweed, Virginia 1 to 3" 3 to 6" after branching -	Mustard, Tansy	-	< 3"		-	-	-
	Pennycress, Field	-	-	-	rosette	-	-
Pigweed, Prostrate         -         < 3"         -         -         -         -	Pepperweed, Virginia	-	-	1 to 3"	3 to 6"	after branching	-
	Pigweed, Prostrate	-	< 3"	-	-	-	-

TABLE 1. APPLICATION RATE AND TIMING - ANNUAL WEEDS (cont.)

Weeds Controlled		WeedMaster® XH	IL Rate per Acre	(according to wee	ed growth stag	e)
(including ALS - and triazine-resistant)	0.4 pint	0.8 pint	1.2 pints	1.6 pints	2.4 pints	3.2 pints
Pigweed, Redroot	-	< 3"	3 to 10"	-	-	-
Pigweed, Smooth	-	< 3"	-	-	-	-
Pigweed, Tumble	-	< 3"	-	mature	-	-
Poorjoe	-	prior to flower	-	-	-	actively growing
Purslane, Common		< 3"	3 to 8"	-	-	-
Ragweed, Common		-	-	> 10"	-	
Ragweed, Western	1 to 3"	3 to 6"	6 to 10"	actively growing	-	-
Ragweed, Lanceleaf	1 to 3"	3 to 6"	6 to 10"	actively growing		
Sedge <sup>1</sup>	-	-	-	-	-	-
Shepherd s Purse	-	rosette	-	-	-	-
Smartweed, Pennsylvania	-	< 4"	-	-	4 to 12"	-
Sneezeweed, Bitter	-	1 to 4"	prior to flower	flower	-	-
Sowthistle	-	rosette	-	bolting	-	-
Sunflower	-	1 to 3"	3 to 6"	6 to 24"	-	-
Swinecress	-	rosette	-	-	-	-
Thistle, Russian	-	-	-	rosette	-	-
Velvetleaf	-	< 6"	6 to 20"	> 20"	-	-
Waterhemp, Common	-	< 3"	3 to 10"	-	-	-

<sup>&</sup>lt;sup>1</sup> For use in non-food/feed crop only. Adding crop oil concentrate has shown to improve performance on actively growing annual sedge.

TABLE 2. APPLICATION RATE AND TIMING - BIENNIAL AND PERENNIAL WEEDS

	WeedMaster® XHL Rate Per Acre (according to weed growth stage)						
Weeds Controlled	0.4 pint	0.8 pint	1.2 pints	1.6 pints	2.4 pints	3.2 - 4.0 pints	
Bindweed, Field	-	-	-	-	-	actively growing	
Bittercress	-	2 to 3"	-	-	-	-	
Buckeye species <sup>1</sup>	-	-	-	-	full leaf	-	
Bullnettle <sup>2</sup>	-	-	-	flower	-	-	
Chicory	-	-	-	-	early bolting	-	
Clover, Bur	-	-	pre-flower	-	-	-	
Dandelion, Common	-	rosette	-	bolting	-	-	
Dewberry, Southern <sup>1</sup>	-	-	-	-	-	spring or fall	
Dock, Curly	-	-	prior to bolting	-	after bolting	-	
Elderberry <sup>2</sup>	-	-	-	-	-	actively growing	
Goldenrod, Missouri	-	-	-	3 to 15"	flower	-	
Goldenweed, Common	-	-	-	-	-	actively growing	
Groundsel, Texas	-	rosette	post-bolting	-	-	-	
Honeysuckle, Hairy	-	-	-	-	spring or fall	-	
Horsenettle, Carolina <sup>1</sup>	-	-	-	-	-	flower or berry	
Ivy, Poison	-	-	-	after bloom	-	-	
Knapweed, Black <sup>2</sup>	-	-	-	-	-	actively growing	

(continued

TABLE 2. APPLICATION RATE AND TIMING - BIENNIAL AND PERENNIAL WEEDS (cont.)

		WeedMaster® XF	IL Rate Per Acre	(according to we	ed growth stage	)
Weeds Controlled	0.4 pint	0.8 pint	1.2 pints	1.6 pints	2.4 pints	3.2 - 4.0 pints
Knapweed, Russian <sup>2</sup>	-	-	-	-	-	actively growing
Knapweed, Spotted	-	-	-	-	-	actively growing
Marshelder	-	-	-	< 12"	12"/prebloom	-
Mesquite	-	-	-	-	-	45 to 90 days after bud-break
Milkweed Antelopehorn <sup>1</sup>	-	-	-	pre-flower	-	flower
Nightshade, Silverleaf 1	-	-	-	full flower	-	-
Nightshade, Black <sup>1</sup>	-	-	-	full flower	-	actively growing
Persimmon, Eastern <sup>3</sup>	-	-	-	-	-	actively growing
Prickly Lettuce	-	-	-	rosette	-	actively growing
Rabbitbrush <sup>2</sup>	-	-	-	-	-	-
Ragwort, Tansy	-	-	-	rosette	-	actively growing
Redvine <sup>2</sup>	-	-	-	-	-	actively growing
Sagebrush, Fringed <sup>2</sup>	-	-	-	-	-	actively growing
Smartweed	-	-	-	-	-	-
Sorrel, Red	-	-	rosette	bolting	flower	actively growing
Sowthistle <sup>2</sup>	-	-	-	-	-	actively growing
Spurge, Leafy <sup>2</sup>	-	-	-	-	flower	full leaf
Tallow Tree, Chinese4	-	-	-	-	-	full leaf
Thistle, Bull	-	-	rosette	bolting	-	actively growing
Thistle, Canada <sup>2</sup>	-	-	-	-	-	actively growing
Thistle, Musk	-	-	-	rosette/bolting	-	-
Thistle, Plumeless	-	-	rosette	bolting	-	-
Vetch, Hairy	-	1 to 4"	4 to 8"	8" full flower	-	-
Yankeeweed	-	-	-	10 to 18"	-	rosette
Yellow Starthistle	-	-	-	-	-	rosette

<sup>&</sup>lt;sup>1</sup>May require repeat applications.

<sup>4</sup>Under dense populations, a second application may be needed the following growing season.

#### AERIAL APPLICATION METHODS AND EQUIPMENT

Water Volume: Use 3 to 10 gallons of water per acre. Use the higher spray volume when treating dense or tall vegetation.

#### GROUND APPLICATION (BANDING)

When applying this product by banding, determine the amount of herbicide and water volume needed using the following formula:

Row width in inches	X Broadcast rate per acre	=	Banding herbicide rate per acre
Band width in inches  Row width in inches	X Broadcast volume per acre	=	Banding water volume per acre

#### GROUND APPLICATION (BROADCAST)

Water Volume: Use 5-40 gallons of spray solution per broadcast acre for optimal performance. Use the higher spray volume when treating dense or tall vegetation.

<sup>&</sup>lt;sup>2</sup>Recommended rate will provide top growth suppression only.

<sup>&</sup>lt;sup>3</sup>For improved root kill or weedy species such as mesquite and eastern persimmon, spray 3.2 pints of this product per acre each year for 3 consecutive years. For increased control of weeds such as blackberry and dewberry, this product may be tank mixed with metsulfuron methyl, Patriot® (EPA Reg. No. 228-391) at 0.1 to 0.2 ounces per acre, if labeled for the use site.

Application Equipment: Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

#### SPOT OR SMALL AREA APPLICATION

This product may be applied to individual clumps or small areas of undesirable vegetation using handgun or similar types of application equipment. Apply diluted sprays to allow complete wetting (up to runoff) of foliage and stems. For knapsack or other small capacity sprayers, prepare a solution of this product in water according to Table 3 (assuming that the spot treatment rate equates to 60 gallons per acre on the broadcast basis.) Adding a surfactant (0.5% by volume) can help improve control. For example, 5 gallons (40 pints or 640 fluid ounces) of herbicide solution would require 0.2 pints (3.2 fluid ounces) of surfactant.

Do not make spot treatments in addition to broadcast or band treatments.

**Application Equipment:** Select nozzles designed to produce minimal amounts of fine spray particles. Spray with nozzles as close to the weeds as is practical for good weed coverage.

#### Table 3. KNAPSACK SPRAYER DILUTION INSTRUCTIONS

Sprayer Capacity (gallons of water)	Amount of WeedMaster® XHL to add to the spray tank
1 gallon	0.8 fluid ounce*
3 gallons	2.4 fluid ounces
5 gallons	4.0 fluid ounces

<sup>\*1</sup> fluid ounce = 2 tablespoons

#### **ADDITIVES**

To improve burndown of emerged weeds, surfactants and/or low use rate of liquid fertilizers (28-0-0,32-0-0), or crop oil concentrate may be used with this product or tank mixes with this product applied after the weeds have emerged. Crop oil concentrate is for non-food/feed crop uses only. Do not apply tank mixes that include Ammonium Sulfate or Crop Oil Concentrate postemergence to any food/feed crop use listed on this label. For food/feed crop uses, do not use liquid fertilizers that contain Ammonium Sulfate (AMS) as a source of nitrogen as tolerances in commodities derived from the crop may contain residues that exceed established tolerances. Consult your local Nufarm representative for recommendations for your area. For additional information, see COMPATIBILITYTEST FOR MIX COMPONENTS.

#### OIL CONCENTRATE

A crop oil concentrate must contain either a petroleum or vegetable oil base and must meet all of the following criteria:

- be nonphytotoxic, contain only EPA-exempt ingredients,
- · provide good mixing quality in the jar test, and
- · be successful in local experience.

The exact composition of suitable products will vary; however, vegetable and petroleum oil concentrates should contain emulsifiers to provide good mixing quality. Highly refined vegetable oils have proven more satisfactory than unrefined vegetable oils. For additional information, see COMPATIBILITYTEST FOR MIX COMPONENTS.

Adjuvants containing crop oil concentrates may be used for preplant, pre-emergence and between cropping applications. Do not use crop oil concentrate for postemergence applications in food/feed crops (i. e., sorghum, grass (hay or silage), pastures, rangeland, sugarcane and wheat).

#### Nitrogen Source

Sprayable liquid fertilizers: Use one quart of sprayable liquid fertilizers (28-0-0, 32-0-0) per acre. Do not use brass or aluminum nozzles when spraying fertilizers.

#### Nonionic Surfactant

The standard label recommendation is 2-4 pints of an 80% active nonionic spray surfactant per 100 gallons of water. For certain weeds, use a higher spray surfactant rate.

#### TABLE 4. ADDITIVE RATE PER ACRE

Additive	Rate Per Acre
Nonionic Surfactant	2 to 4 pints per 100 gallons
Sprayable liquid fertilizers (28-0-0, 32-0-0)	2 to 4 quarts
Crop Oil Concentrate	1 quart*

<sup>\*</sup>see manufacturer's label for specific rate recommendations

#### TANK MIXING INFORMATION

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Physical incompatibility, reduced weed control, or crop injury may result from mixing this product with other pesticides (fungicides, herbicides, insecticides, or miticides), additives, or fertilizers. Nufarm does not recommend using tank mixes other than those listed on Nufarm labeling without prior experience or first testing on a small area. Local agricultural authorities may be a source of information when using other than Nufarm recommended tank mixes.

#### COMPATIBILITY TEST FOR MIX COMPONENTS

Before mixing components, always perform a compatibility jar test.

For 20 gallons per acre spray volume, use 3.3 cups (800 ml) of water. For other spray volumes, adjust accordingly. Only use water from the intended source at the source temperature.

Add components in the sequence indicated in the Mixing Order using 2 teaspoons for each pound or 1 teaspoon for each pint of recommended label rate per acre.

Always cap the jar and invert 10 cycles between component additions.

When the components have all been added to the jar, let the solution stand for 15 minutes, Evaluate the solution for uniformity and stability. The spray solution should not have free oil on the surface, nor fine particles that precipitate to the bottom, nor thick (clabbered) texture. If the spray solution is not compatible, repeat the compatibility test with the addition of a suitable compatibility agent. If the solution is then compatible, use the compatibility agent as directed on its label. If the solution is still incompatible, do not mix the ingredients in the same tank.

#### MIXING ORDER

If an inductor is used, rinse it thoroughly after each component has been added. Maintain constant agitation during application.

- 1) Water\*. Begin by agitating a thoroughly clean sprayer tank half full of clean water.
- 2) **Agitation.** Maintain constant agitation throughout mixing and application.
- 3) Products in PVA bags. Place any product contained in water-soluble PVA bags into the mixing tank. Wait until all water-soluble PVA bags have fully dissolved and the product is evenly mixed in the spray tank before continuing.
- 4) Water-dispersible products (such as dry flowables, wettable powders, suspension concentrates, or suspo-emulsions).
- 5) Water-soluble products. (such as WeedMaster® XHL).
- 6) Emulsifiable concentrates (such as oil concentrate).
- 7) Water-soluble additives (such as liquid fertilizers (28-0-0, 32-0-0) when applicable).
- 8) Remaining quantity of water.

\*If sprayable fluid fertilizer is used as the carrier, this product must be diluted with a minimum of 5 parts water to 1 part this product. Then add 0.25 to 0.50% volume/volume of a nonionic surfactant to the dilution before adding it to the sprayable fluid fertilizer to reduce the concern for compatibility problems with this mix. Always perform the Compatibility Test before mixing into the spray tank. Also, when using a sprayable fluid fertilizer as the carrier, any product contained in PVA bags must first be completely dissolved in water before the contents can be added to the fertilizer mix.

#### PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of this product.

- Hose down thoroughly the inside as well as outside surfaces of equipment while filling the spray tank half full of water. Flush by operating sprayer until the system is purged of the rinse water.
- 2) Fill tank with water while adding 1 quart of household ammonia or 1/4 pint of Neutral-Clean™ for every 25 gallons of water. Operate the pump to circulate the ammonia solution through the sprayer system for 15 to 20 minutes and discharge a small amount of the ammonia solution through the boom and nozzles. Let the solution stand for several hours. Or perferable overnight.
- 3) Flush the solution out of the spray tank through the boom.
- 4) Remove the nozzles and screens and flush the system with two full tanks of water.

The steps listed below are suggested for thorough cleaning of spray equipment used to apply this product as a tank mix with wettable powders (WP), emulsifiable concentrates (EC), or other types of water-dispersible formulations. Tank mixing this product with water-dispersible formulations, requires the use of a water/deterent rinse.

- 5) Complete step 1.
- 6) Fill tank with water while adding 2 pounds of detergent for every 40 gallons of water. Operate the pump to circulate the detergent solution through the boom and nozzles. Let the solution stand for several hours, preferably overnight.
- 7) Flush the detergent solution out of the spray tank through the boom.
- 8) Repeat step 1, and follow with steps 2, 3 and 4.

#### CROP ROTATION INTERVALS

The interval between application and planting rotational crop is given below. Always exclude counting days when the ground is frozen. Planting at intervals less than specified below may result in crop injury. Moisture is essential for the degradation of this herbicide in soil. If dry weather prevails, use cultivation to allow herbicide contact with moist soil.

- Planting/replanting restrictions for WeedMaster® XHL for applications of 4.8 pints per acre or less: No rotational cropping
  restrictions apply at 120 days or more following application. Additionally, for annual crop uses in this label including sorghum, follow the
  preplant use directions in the Food/Feed Crop-Specific Information. For barley, oat, wheat, and other grass seedings (including rice), the
  interval between application and planting is 7 days per 0.5 pint per acre.
- Planting/replanting restrictions for applications of more than 4.8 pints and up to 6.4 pints of this product per acre: Corn, soybean, sorghum, cotton (east of the Rocky Mountains) and all other crops grown in areas with 30" or more of annual rainfall may be planted 120 days or more after application. Barley, oat, wheat, and other grass seedings (including rice), may be planted if the interval from application to planting is 7 days per 0.5 pint per acre east of the Mississippi River and 11 days per 0.5 pint per acre west of the Mississippi River. For all other crops in areas with less than 30" of annual rainfall, the interval between application and planting is 180 days or more.

#### USE RESTRICTIONS

- Do not apply through any type of irrigation equipment.
- Do not contaminate irrigation ditches or water used for domestic purposes.

#### PRECAUTIONS

- Rainfast period: Rainfall or irrigation occurring within 4 hours after postemergence applications may reduce the effectiveness of this product.
- Stress: Avoid application to crops under stress such as stress due to lack of moisture, hail damage, flooding, herbicide injury, mechanical
  injury, or widely fluctuating temperatures, as unsatisfactory control may result.
- Avoid application to crops that show injury (leaf phytotoxicity or plant stunting) produced by any other prior herbicide applications because this injury may be enhanced or prolonged.

# FOOD/FEED CROP-SPECIFIC INFORMATION

#### PASTURES, RANGELAND AND GRASS (HAY, SILAGE)

This product is recommended for use for pasture (including pasture grown for hay), rangeland and grass grown for hay or silage. Refer to Tables 1 and 2 for rate selection based on targeted weed or brush species. Some weed species will require tank mixes for adequate control.

Rates above 3.2 pints of this product per acre are for spot treatments only. Uses described in this section also pertain to small grains (such as barley, corn, forage sorghum, oats, rye, sudangrass, or wheat) grown for pasture, hay, and silage only. Newly seeded areas, including small grains grown for pasture or hay, may be injured if rates of this product greater than 1.6 pints per acre are applied.

In newly established hybrid Bermudagrass, Pangolagrass, and stargrasses (Cynodon spp.), use 1.6 to 3.2 pints of this product per acre to control or suppress weeds after planting vegetative propogules (stolens) of hybrid bermudagrasses. In addition to the weeds listed in Tables 1 and 2, this rate of this product will control or suppress annual sedges, broadleaf signalgrass, crabgrass, and goosegrass. Best results will be obtained if this product is applied at the germinating stage of weeds. Under favorable conditions, this is usually 7 to 10 days after planting these grasses. Reduced control can be expected if weeds are allowed to reach 1\* in height before application or if germination of weeds occurs 10 days after application.

Do not use on bentgrass, susceptible grass pastures (such as carpetgrass, buffalograss, or St. Augustine grass), lespedeza, wild winter peas, vetch, clover, and alfalfa pastures as injury will occur.

When perennial weeds are reaching maturity, mowing and allowing some regrowth will enhance control. Difficult to control weeds and brush may require repeat applications.

For pasture renovations, wait 2 weeks per 1.0 pints of this product used per acre before interseeding or injury may occur. If grasses are grown for seed or for seed-down purposes, do not apply after grass reaches the joint stage.

#### GRASSES FOR SEED CROPS

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	USE DIRECTIONS
Broadleaf weeds in grass being grown for seed	1.0 - 3.2	Apply this product using up to 30 gallons of water per acre by air or ground equipment in the spring or fall. Do not apply from early boot to milk stage. Spray seedling grass only after the five leaf stage, using 1.0 pint per acre to control small seedling weeds. After the grass is well established, higher rates of up to 3.2 pints per acre can be used to control hard-to-control annual or perennial weeds. For best results, apply when soil moisture is adequate for good growth.

#### RESTRICTIONS:

- Do not make more than 2 applications per year.
- Do not apply more than 3.2 pints/acre of this product (1.5 lb 2,4-D ae and 0.5 lb Dicamba ae) per application.
- Do not apply more than 6.4 pints/acre of this product (3.0 lb 2,4-D ae and 1.0 lb Dicamba ae) per year.
- When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 1.5 lb 2,4-D ae or 0.5 lb Dicamba ae per application.
  - Do not apply more than 3.0 lb 2,4-D ae and 1.0 lb dicamba ae per acre per year.
- . Retreatment Interval (RTI): 30 days.
- Do not apply after the grass seed crop begins to joint.

#### PRECAUTIONS:

- Application to bentarass could result in injury.
- No-TIII Application: This product may be used in the broadcast method with a normal boom or with direct pipes set 12" apart in 36" rows. When using this product, apply at a rate of 1.0 pint (0.5 lb 2,4-D ae and 0.16 lb Dicamba ae) in 10 gallons of water per acre. Maintain uniform pressure and speed when applying.

#### GRASSES CUT FOR HAY OR SILAGE:

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	USE DIRECTIONS
Use only on established stands of perennial grasses	1.0 – 3.2	Use sufficient water to give good coverage depending on type of weeds and stage of growth.

- Do not use on alfalfa, bentgrass, clover, or other legumes. Do not use on newly seeded areas until grass is well established.
- Do not apply after the crop begins to joint when grass seed production is desired.
- Do not make more than 2 applications per year.
- · Retreatment interval (RTI): 30 days.
- Do not apply more than 3.2 pints of this product (1.5 lb 2,4-D ae and 0.5 lb Dicamba ae) per acre per application.
- Do not apply more than 6.4 pints of this product (3.0 lb 2,4-D ae and 1.0 lb Dicamba ae) per acre per year.
- . When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 1.5 lb 2,4-D ae or 0.5 lb Dicamba ae per application.
  - Do not apply more than 3.0 lb 2,4-D ae or 1.0 lb dicamba ae per acre per year.
- Dry hay and Silage: Treated grasses may be harvested for dry hay or silage but do not harvest within 7 days of treatment.
- Grazing and Feeding Non-lactating Animals: There is no waiting period between treatment and grazing for non-lactating animals.
   Do not permit meat animals being finished for slaughter to graze treated fields within 30 days of slaughter.
- Grazing and Feeding Lactating Animals: Do not graze lactating dairy animals within 7 days of treatment.
- If grass is to be cut for hay, Agricultural Use Requirements for the Worker Protection Standard are applicable.
- For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used.
   The more restrictive requirements of the program rules or this label must be followed.

# PASTURES AND RANGELAND (HAY, SILAGE) FOR POSTEMERGENCE USE

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	NOTES ON TANK MIXES
Susceptible annual and biennial broadleaf weeds	2.2	This product may be applied in tank mixes with one or more of the following herbicides including (but not limited to): dicamba, metsulfuron methyl,
Moderately susceptible biennial and perennial broadleaf weeds	2.2 – 4.2	triasulfuruon, aminopyralid, picloram, clopyralid, triclopyr.
Difficult to control weeds and woody plants	4.2	
Spot treatment	4.2	

#### RESTRICTIONS:

#### Postemergence:

- For susceptible annual and biennial broadleaf weeds, do not exceed 2.2 pints of this product (1.0 lb 2,4-D ae and 0.3 lb dicamba ae) per acre per application.
- For moderately susceptible biennial and perennial broadleaf weeds and for difficult to control weeds and woody plants, do not exceed 4.2 pints of this product. (2.0 lb 2.4-D ae and 0.7 lb Dicamba ae) per acre per application.
- Spot treatments: do not exceed 4.2 pints of this product. (2.0 lb 2.4-D ae and 0.7 lb Dicamba ae) per acre.
- Do not make more than 2 applications per year.
- Do not apply more than 4.2 pints of this product (2.0 lb 2,4-D ae and 0.7 lb Dicamba ae) per acre per application.
- Do not apply more than 8.4 pints of this product (4.0 lb 2.4-D ae and 1.3 lb Dicamba ae) per acre per year.
- When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 2.0 lb 2.4-D ae or 0.7 lb Dicamba ae per application.
  - Do not apply more than 4.0 lb 2,4-D ae or 1.3 lb dicamba ae per acre per year.
- · Retreatment Interval (RTI): 30 days
- Dry hay and Silage: Treated grasses may be harvested for dry hay or silage but do not harvest within 7 days of treatment.
- Grazing and Feeding Non-lactating Animals: There is no waiting period between treatment and grazing for non-lactating animals.
   Do not permit meat animals being finished for slaughter to graze treated fields within 30 days of slaughter.
- Grazing and Feeding Lactating Animals: Do not graze lactating dairy animals within 7 days of treatment.
- If grass is to be cut for hav. Agricultural Use Requirements for the Worker Protection Standard are applicable.

#### SORGHUM

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	USE DIRECTIONS & NOTES ON TANK MIXES
Susceptible annual and biennial broadleaf weeds	0.8	Apply this product to sorghum in the 3 to 5 leaf stage (4 to 8" tall). For best performance, apply this product when weeds are small (less than 3" tall).
		Applications of this product to sorghum during periods of rapid growth may result in temporary leaning of plants or rolling of leaves. These effects are usually outgrown within 10 to 14 days. Sorghum growing under conditions of stress such as high moisture, low fertility, and abnormal temperature may be more sensitive to applications of this product.
		This product may be applied in tank mixes with one or more of the following herbicides: atrazine, bentazon, bromoxynil, halosulfuron, prosulfuron, quinclorac.

- Make no more than one postemergence application per year.
- Preharvest Interval (PHI): 30 days.
- Do not apply more than 0.8 pints of this product (0.38 lb 2,4-D ae and 0.13 lb dicamba ae) per acre per application.
- When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 0.38 lb 2,4-D ae or 0.13 lb dicamba ae per application.
  - Do not apply more than 0.38 lb 2.4-D ae or 0.13 lb dicamba per acre per year.
- Do not permit meat or dairy animals to consume treated sorghum as fodder or forage for 30 days following application.
- Do not use surfactants or oils with postemergence applications of this product on sorghum crops.
- Do not use this product if the potential for sorghum injury is not acceptable.
- Do not apply this product to sorghum grown for seed production.

#### SUGARCANE

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	USE DIRECTIONS & NOTES ON TANK MIXES
Annual broadleaf weeds labeled in Table 1	1.6	Applications of this product can be made any time after the weeds have emerged and are actively growing but prior to the close-in stage of sugarcane. When possible,
Perennial weeds listed in Table 2	1.6 – 4.2	direct the spray beneath the sugarcane canopy in order to minimize the likelihood of crop injury. The use of directed sprays will also aid in maximizing spray coverage of weed foliage. Use the higher rate ranges when treating dense vegetative growth.
		This product may be applied in tank mixes with one or more of the following herbicides: ametryn, asulam, atrazine, metribuzin, and terbacil.

#### RESTRICTIONS:

- Pre-emergence: Limited to 1 application per crop cycle. Maximum of 4.2 pints (2.0 lb 2,4-D ae and 0.7 lb dicamba ae) per acre per application.
- Postemergence: Limited to 1 application per crop cycle. Maximum of 4.2 pints (2.0 lb 2,4-D ae and 0.7 lb dicamba ae) per acre per application.
- Do not apply more than 8.4 pints of this product (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per acre per year.
- When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 2.0 lb 2,4-D ae or 0.7 lb dicamba ae per acre per application.
- Do not apply more than 4.0 lb 2,4-D ae or 1.3 lb dicamba ae per acre per year.
- Do not harvest cane prior to crop maturity.
- Preharvest Interval (PHI): 87 days

### WHEAT

# (Fall and Spring - Seeded)

If small grains are grown for pasture or hay only, refer to Pastures, Rangeland and Grass (Hay, Silage)

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	USE DIRECTIONS
Early Season Applications	0.4 – 0.8	Early season applications to spring-seeded wheat must be made after tillering and before wheat reaches the 6-leaf stage. Early season applications to fall-seeded wheat must be made after tillering and prior to the jointing stage. Care should be taken in staging early developing wheat varieties to be certain that the application occurs prior to the jointing stage.
Fall-seeded Wheat only	Up to 1.1	Apply on fall-seeded wheat after the wheat begins to tiller for suppression of perennial weeds, such as field bindweed. Applications may be made in the fall following a frost but before a killing freeze. Periods of extended stress such as cold and wet weather may enhance the possibility of crop injury. For fall applications only, do not use if the potential for crop injury is not acceptable.
Preharvest Application*	1.1	This product can be used to control weeds that may interfere with harvest of wheat. Apply as a broadcast or spot treatment to annual broadleaf weeds when wheat is in the hard dough stage and the green color is gone from the nodes (joints) of the stem. Best results will be obtained if application can be made when weeds are actively growing but before weeds canopy. A waiting interval of 14 days is required before harvest. Do not use preharvest-treated wheat for seed unless a germination test is performed on the seed with an acceptable result of 95% germination or better. For control of additional broadleaf weeds or grasses, this product may be tank mixed with other herbicides such as metsulfuron methyl or glyphosate that are registered for preharvest use in wheat.  **Not Registered for Preharvest Use on Wheat by California.

#### NOTES ON TANK MIXES:

This product may be applied in tank mixes with one or more of the following herbicides: bromoxynil, carfentrazone ethyl, chlorsulfuron, clopyralid, diuron, MCPA, metribuzin, metsulfuron methyl, prosulfuron, thifensulfuron methyl, triasulfuron, tribenuron methyl. Do not use low rates of sulfonylurea herbicides on more mature weeds or on dense vegetative growth. Tank mixes with diuron and metribuzin are for use in fall-seeded wheat only.

- Do not exceed one postemergence application and one preharvest application per year.
- Do not apply more than 1.1 pints of this product (0.5 lb 2,4-D ae and 0.17 lb dicamba ae) per acre per application.
- Do not apply more than 2.2 pints of this product (1.0 lb 2.4-D ae and 0.34 lb dicamba ae) per acre per year.
- When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 0.5 lb 2,4-D ae and 0.17 lb dicamba ae per acre per application.
  - Do not apply more than 1.0 lb 2,4-D ae and 0.34 lb dicamba ae per acre per year.

- Preharvest Interval (PHI): 14 days.
- Do not graze or harvest for livestock feed prior to crop maturity.
- Do not use this product in wheat underseeded with legumes.

# PREPLANT APPLICATION DIRECTIONS FOR BROADLEAF CONTROL IN CROPLAND ROTATED TO WHEAT (POST-HARVEST / FALLOW / STUBBLE / SET-ASIDE)

#### WEEDS CONTROLLED

This product, when applied at the listed rates, will control the ANNUAL and BIENNIAL weeds and suppress the PERENNIAL weeds listed below.

ANNUALS					
Buckwheat, Wild Mustards		Salsify, Western			
Cockle, Cow	Nightshade, Black	Smartweed, Pennsylvania			
Cocklebur, Common	Pigweed, Redroot (Carelessweed)	Sowthistle, Annual			
Knotweed	Pigweed, Rough	Sunflower			
Kochia	Purslane, Common	Tansymustard			
Lambsquarters, Common	rs, Common Ragweed, Common Thistle, Russian				
Mallow, Common	Sage, Lanceleaf	Velvetleaf			
BIENNIALS					
Carrot, Wild	Starthistle, Yellow	Thistle, Musk			
Ragwort, Tansy	Thistle, Bull	Thistle, Plumeless			
PERENNIALS					
Bindweed, Field	Bindweed, Field Dock, Curly Thistle, Canada				

#### **BATES AND TIMING**

Application may be made to fallow land, wheat stubble or land to be rotated to wheat. Application should be made to emerged and actively growing weeds. Use higher rate when treating dense vegetative growth. Avoid disturbing treated areas for seven days following application.

Wheat injury may occur if the interval between application and planting is less than 10 days for each 0.8 pint per acre (or 7 days for each 0.5 pint per acre) of this product is used. Exclude days when ground is frozen.

Weed Type & Stage	Broadcast Rate per Treated Acre
Annual	
Small, actively growing	0.8 to 1.2 pints
(less than 4 inches)	
Established weed growth	1.2 to 2.4 pints
(greater than 4 inches)	
Biennial	
Rosette diameter	
(3 inches or less)	1.2 to 1.6 pints
(3 inches or more)	1.6 to 3.2 pints
Greater than 4 inches, tillering	3.2 pints
Bolted or flowering	
Perennial	
Suppression or top growth control	1.6 to 3.2 pints
Seasonal Control	3.2 to 4.2 pints

Add 0.5% v/v of an agriculturally approved surfactant to this product when used alone or in a tank mix. The addition of a surfactant will enhance spray coverage and the herbicide's penetration of weed foliage. Retreatment may be made 30 days after initial treatment; however, do not exceed a total of 8.4 pints of this product (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per treated acre per year.

#### Cropland Rotated to Wheat (Post-Harvest / Fallow / Stubble / Set-Aside) Restrictions:

- Plant only labeled crops within 29 days following application.
- Do not make more than 2 applications per year.
- Do not apply more than 4.2 pints (2.0 lb 2.4-D ae and 0.7 lb dicamba ae) per acre per application.
- Do not apply more than 8.4 pints (4.0 lb 2.4-D ae and 1.3 lb dicamba ae) per acre per year.
- Retreatment Interval (RTI): 30 days.
- When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 2.0 lb 2.4-D ae and 0.7 lb dicamba ae per acre per application.
  - Do not apply more than 4.0 lb 2,4-D ae and 1.3 lb dicamba ae per acre per year.

#### TANK MIX TREATMENTS

This product may be tank mixed with other labeled herbicides for control of grasses or additional broadleaf weeds. Read and follow the label of each tank mix product used for precautionary statements, directions for use, rates and timings, weeds controlled, geographic or other restrictions. Examples of tank mix partners include the following:

Herbicide

Atrazine

Chlorsulfuron Flumioxazin

Glyphosate

Metribuzin

Paraguat

# CORN (PREPLANT and PREEMERGENCE ONLY) (Field, Popcorn, Seed)

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	USE DIRECTIONS	
Preplant	1 to 2 pints	To control actively growing emerged broadleaf weed seedlings or existing cover crops prior to planting corn, apply 7 to 14 days before planting. Preplant interval excludes days when the ground is frozen. Preplant application may be used with no-tillage, conventional tillage or reduced tillage practices.	

#### Corn (Preplant) Restrictions:

• Do not use more than 1.6 pints of this product (0.75 lb 2,4-D ae and 0.25 lb dicamba ae) per acre if the soil organic matter is less than 2%.

See Corn (Preplant and Preemergence) Restrictions for additional restrictions.

Preemergence		Apply 3 to 5 days after planting but before corn emerges. Preemergence application may be used with no-tillage, conventional tillage or reduced tillage practices.
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#### Corn (Preemergence) Restrictions:

- Do not use this product if corn seeds are less than 1.5" below the soil surface.
- Do not use this product if the soil organic matter is less than 2%.

See Corn (Preplant and Preemergence) Restrictions for additional restrictions.

### Corn (Preplant and Preemergence) Restrictions:

- Do not use on light, sandy soil (sand, sandy loam, and loamy sand), or where soil moisture is inadequate for normal weed growth.
   Do not apply this product to popcorn or seed corn without first verifying the selectivity of this product on the variety with your local
- Do not apply this product to popcorn or seed corn without first verifying the selectivity of this product on the variety with your loca seed corn company (supplier).
- Do not use this product on sweet corn.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D and dicamba pre-plant use.
- Do not apply more than 2 pints of this product (0.9 lb 2,4-D ae and 0.3 lb dicamba ae) per acre per application.
- Limited to one preplant or one preemergence application per year.
- If applying a spring preplant treatment following application of a fall post-harvest application to the previous crop, then the combination of both treatments may not exceed 4 pints of this product (1.9 lb 2,4-D ae and 0.6 lb dicamba ae).
- When tank mixing with products that contain 2,4-D or Dicamba:
  - Do not apply more than 0.9 lb 2.4-D ae and 0.3 lb dicamba ae per acre per application.

#### NOTES:

- Refer to Tables 1 and 2 to determine use rates for specific targeted weed species, but do not exceed rate stated for corn preplant and preemergence.
- Use high rate for less susceptible weeds, larger weeds or cover crops such as alfalfa.
- For applications made 30 or more days before planting, follow the directions and precautions for 'Postharvest, Fallow, Crop Stubble' listed in the NON-FOOD / FEED USE section of the container label.
- Best results will be obtained when product is mixed with additives or tank mixed with additional herbicides. See ADDITIVES and TANK MIXING INFORMATION sections of the container label.
- For best control of legume sod (e.g., alfalfa or clover), apply this product after 4 to 6 inches of legume regrowth has occurred.
- Certain tillage equipment (e.g., drags, harrows) which concentrates treated soil over seed furrow may increase the risk of crop injury.
- Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

## SOYBEAN\* (PREPLANT ONLY)

\*Not Registered for Use by California.

APPLICATION TYPE	USE RATE (PINTS PER ACRE)	Minimum Waiting Interval Before Planting Soybeans (Exclude days when ground is frozen)	USE DIRECTIONS
Preplant	0.8 - 1.0	15 Days	Apply before planting soybeans to control actively growing emerged broadleaf weed seedlings.
	1.0 - 2.0	30 Days	Apply to control actively growing emerged broadleaf weeds.

#### RESTRICTIONS:

- · For use only preplant to soybeans.
- Following application, a minimum accumulation of 1" rainfall or overhead irrigation followed by the specified minimum waiting interval, is required before planting soybeans.
- Do not make more than one application of this product per year.
- Do not apply more than 2 pints of this product (0.9 lb 2.4-D ae and 0.3 lb dicamba ae) per acre per year.
- 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 replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D and dicamba pre-plant use.
- Do not mow or cultivate weeds prior to treating with this product as poor control may result.
- Do not apply this product preplant to soybean in fields having a coarse-textured soil where the organic matter is less than 1%.
- Do not allow livestock to graze treated cover crops. Do not cut treated cover crops for hay or feed.
- The minimum waiting intervals must be observed prior to planting soybean or crop injury may occur.
  - Do not make preplant applications of this product to soybean in geographic areas with average annual rainfall less than 25".

#### NOTES:

- Refer to Tables 1 and 2 to determine use rates for specific targeted weed species, but do not exceed rate stated for soybeans preplant.
- For applications applied 60 or more days before planting soybeans, follow the directions and precautions for 'Postharvest, Fallow, Crop Stubble' listed in the container label.
- Best results will be obtained when product is mixed with additives or tank mixed with additional herbicides. See **ADDITIVES** and **TANK MIXING INFORMATION** sections of this label.

## COTTON\* (PREPLANT ONLY)

\*Not Registered for Use by California.

	USE RATE (PINTS PER ACRE)	Minimum Waiting Interval Before Planting Cotton	USE DIRECTIONS
Preplant	1.6	30 Days	Apply to control actively growing emerged broadleaf weeds prior to planting cotton. For best performance, apply when weeds are in the 2-4 leaf stage and rosettes are less than 2"
			across.

#### RESTRICTIONS:

- · For use only preplant to cotton.
- Following application, a minimum accumulation of 1" rainfall or overhead irrigation followed by the specified minimum waiting interval, is required before planting cotton.
- Do not make more than 2 applications per year.
- Do not apply more than 1.6 pints of this product (0.75 lb 2,4-D ae and 0.25 lb dicamba ae) per acre per application in one season prior to planting cotton.
- Do not apply more than 3.2 pints of this product (1.5 lb 2,4-D ae and 0.5 lb dicamba ae) per acre per year.
- Do not apply this product prior to planting cotton if you are not prepared to accept the results of cotton injury including possible loss
  of stand and yield.
- Do not replant fields treated with this product in the same growing season with crops other than those labeled for 2,4-D and dicamba pre-plant use.
- Mowing or cultivating weeds prior to treatment with this product may result in poor weed control.
- Do not apply this product pre-plant to cotton in fields having a coarse-textured soil where the organic matter is less than 1%.
- Do not feed treated hay, forage, or fodder. Do not allow livestock to graze treated cover crops.
- Do not cut treated crop for feed, hay, forage, or fodder. Do not allow livestock to graze treated cotton. The minimum waiting intervals must be observed prior to planting cotton or crop injury may occur.
- Do not make preplant applications of this product to cotton in geographic areas with average annual rainfall less than 25".

#### NOTES:

- Refer to Tables 1 and 2 to determine use rates for specific targeted weed species, but do not exceed rate stated for cotton preplant.
- For applications applied 75 or more days before planting, follow the directions and precautions for 'Postharvest, Fallow, Crop Stubble' listed in the container label.
- Best results will be obtained when product is mixed with additives or tank mixed with additional herbicides. See **ADDITIVES** and **TANK MIXING INFORMATION** sections of this label.

# BETWEEN CROP APPLICATIONS, CONSERVATION RESERVE PROGRAMS, GENERAL FARMSTEAD AND FALLOW SYSTEMS

These uses are considered Food/Feed Crops when harvested, grazed or foraged. Consult adjuvant restrictions on Non-Food/Feed Use for specific use directions.

# NON-FOOD/FEED USE - SPECIFIC INFORMATION (Land not Harvested, Grazed or Foraged) BETWEEN CROP APPLICATIONS

#### PREPLANT DIRECTIONS (POSTHARVEST, FALLOW, CROP STUBBLE, SET-ASIDE) FOR BROADLEAF WEED CONTROL:

This product herbicide can be applied either postharvest in the fall, spring, or summer during the fallow period or to crop stubble/set-aside acres. Apply this product as a broadcast or spot treatment to emerged and actively growing weeds after crop harvest (postharvest) and before a killing frost or in the fallow cropland or crop stubble the following spring or summer.

See the **CROP ROTATION INTERVALS** section of this label for the recommended interval between application and planting to prevent crop injury.

Rates and Timings: Apply 0.4 to 4.2 pints of this product (0.2 to 2.0 lb 2,4-D ae and 0.06 to 0.7 lb dicamba ae) per acre. Refer to Tables 1 and 2 to determine use rates for specific targeted weed species. Do not exceed a total of 4.2 pints (2.0 lb 2,4-D ae and 0.7 lb dicamba ae) of this product per treated acre per year. For best performance, apply this product when annual weeds are less than 6" tall, when biennial weeds are in the rosette stage and to perennial weed regrowth in late summer or fall following a mowing or tillage treatment.

The most effective control of upright perennial broadleaf weeds such as Canada thistle and Jerusalem artichoke occurs if this product is applied when the majority of weeds have at least 4 to 6" of regrowth or for weeds such as field bindweed and hedge bindweed that are in or beyond the full bloom stage.

Avoid disturbing treated areas following application. Treatments may not kill weeds that develop from seed or underground plant parts such as rhizomes or bulblets, after the effective period for this product. For seedling control, a follow-up program or other cultural practices could be instituted.

#### POSTHARVEST, FALLOW, CROP STUBBLE, SET-ASIDE AND PREPLANT USE RESTRICTIONS

Follow specific restrictions and precautions in **CROP ROTATION INTERVALS** and **FOOD/FEED CROP-SPECIFIC INFORMATION** sections of this label for replant intervals.

- Plant only labeled crops within 29 days following application, unless otherwise specified by label restrictions.
- Limited to 2 applications per year.
- Do not apply more than 4.2 pints (2.0 lb 2.4-D ae and 0.7 lb dicamba ae) per acre per application.
- Do not apply more than 8.4 pints (4.0 lb 2.4-D ae and 1.3 lb dicamba ae) per acre per year.
- Retreatment Interval (RTI): 30 days

#### BETWEEN CROP TANK MIXES

In tank mixes with other labeled herbicides, apply 0.4 to 1.6 pints of this product (0.2 to 0.75 lb 2,4-D ae and 0.06 to 0.25 lb dicamba ae) per acre for control of annual weeds or 1.6 to 4.2 pints of this product (0.75 to 2.0 lb 2,4-D ae and 0.25 to 0.7 lb dicamba ae) per acre for control of biennial and perennial weeds. Tank mix partners include but are not limited to the following:

2,4-D	Glyphosate	Clopyralid	Quinclorac
Atrazine	Metribuzin	Dicamba	Triasulfuron
Carfentrazone ethyl	Metsulfuron methyl	Flumioxazin	
Chlorsulfuron	Paraquat	Picloram	

### CONSERVATION RESERVE PROGRAMS AND GENERAL FARMSTEAD

Application Type	USE RATE (PINTS PER ACRE)	USE DIRECTIONS
Conservation Reserve Programs,	Refer to Tables 1 and 2 for rate	Rates above 3.2 pints of this product (1.5 lb 2,4-D ae and
general farmstead (non-cropland	selection based on targeted weed or	0.5 lb dicamba ae) per acre per application are for spot
only), weed and brush control, or use	brush species. Some weed species	treatments only. Retreatments may be made as needed;
in State Recognized Noxious Weed	will require tank mixes for adequate	however, do not exceed a total of 6.4 pints of this product
areas (noncropland areas)	control.	(3.0 lb 2,4-D ae and 1.0 lb dicamba ae) per treated acre
		per year, except for spot treatments.

- Preharvest Interval (PHI): 7 days (cut forage for hay).
- · Maximum of 2 applications per year, except for woody plants. For woody plant, do not make more than one application per year.
- Rates above 3.2 pints (1.5 lb 2,4-D ae and 0.5 lb dicamba ae) per acre per application and 6.4 pints (3.0 lb 2,4-D ae and 1.0 lb dicamba ae) per acre per year are for spot treatments only.
- . For Spot Treatments:
  - Maximum of 4.2 pints (2.0 lb 2,4-D ae and 0.7 lb dicamba ae) per acre per application.
  - Maximum of 8.4 pints (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) 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.
- For program lands, such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used.
   The more restrictive requirements of the program rules or this label must be followed.

#### NON-CROP APPLICATIONS

RIGHTS-OF-WAY (RAILROAD, ROADSIDES, UTILITY, PIPELINE), NON-SELECTIVE FOREST BRUSH CONTROL, INDUSTRIAL SITES, NON-IRRIGATION DITCHBANKS, AND UNCULTIVATED AREAS.

#### SPECIES CONTROLLED

When used as directed, this product will control or suppress many herbaceous broadleaf weeds (annual, biennial, and perennial) as well as many unwanted woody plant and vine species. Species controlled include the following herbaceous broadleaf weeds and the woody brush and vines in Table 5:

#### HERBACEOUS BROADLEAF WEEDS

ANNIIAI S

Buckwheat wild Cocklebur Carpetweed Daisy, English Chickweed Henhit

Lambsquarter Morningglory Mustard Pigweed

Purslane Ragweed Smartweed Velvetleaf

Clover **BIENNIALS** 

Carrot, Wild Thistle, Musk Ragwort, Tansv

Knawl

**PERFNNIALS** 

Bindweed Field Milkweed Dock, Curly Ragweed, Perennial Dogfennel

Sorrel, Sheep

Spurge, Leafy Thistle, Canada Toadflax Dalmatian

Knapweed, Russian

#### TABLE 5. WOODY BRUSH AND VINES CONTROLLED OR SUPPRESSED BY FOLIAR. BASAL OR CUT STUMP APPLICATIONS

Alder	Elm	Oak, Poison	Spruce
Ash	Grape	Olive, Russian	Sumac
Aspen	Greenbriar	Persimmon, Eastern	Sweetgum
Basswood	Gum	Pine	Sycamore
Beech	Hawthorn (Thornapple)*	Plum, Sand (Wild Plum)*	Tarbush
Birch	Hemlock	Poplar	Trumpetcreeper
Blackberry*	Hickory	Puncturevine	Waxmyrtle
Blackgum	Honeylocust	Rabbitbrush	Willow
Cedar	Honeysuckle	Raspberry	Witchhazel
Cherry	Hornbeam	Redcedar, Eastern*	Yaupon*
Chinquapin	Huckleberry	Redvine	Yucca
Cottonwood	Huisache	Rose, Macartney	
Creeper, Virginia	Ivy, Poison	Rose, Multiflora*	
Creosotebush*	Kudzu	Sagebrush, Fringe	
Cucumber tree	Locust, Black	Sassafras	
Dewberry	Maple	Schinus (Florida Holly, Brazilian Peppertree, Christmas-berry)	
Dogwood*	Mesquite	Serviceberry	
Elderberry	Oak	Snowberry	

<sup>\*</sup>Suppression

#### RESTRICTIONS

## Postemergence (annual and perennial weeds):

- · Limited to 2 applications per year.
- Do not apply more than 4.2 pints (2.0 lb 2.4-D ae and 0.7 lb dicamba ae) per acre per application.
- Do not apply more than 8.4 pints (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per acre per year.
- . Minimum of 30 days between applications.

#### Postemergence (woody):

- Limited to 1 application per year.
- Maximum of 8.4 pints (4.0 lb 2.4-D ae and 1.3 lb dicamba ae) 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.

#### APPLICATION TIMING

Regardless of the species to be controlled, spray volumes should be high enough to allow for good spray coverage. Make applications when weeds and brush are actively growing. The addition of surfactants can increase control. Biennials are best controlled when treated in the rosette stage. Regrowth may occur on resistant species. To control additional weed species, this product may be tank mixed with other suitable herbicides that are labeled for non-crop use sites.

#### HERBACEOUS ANNUAL, BIENNIAL, AND PERENNIAL BROADLEAF WEED CONTROL

Apply 1.6 to 4.2 pints of this product in 20 to 100 gallons of water per treated acre, (equivalent to 0.6 to 1.6 fl oz per 1,000 sq ft). When using low-volume application equipment, 3 to 20 gallons of water per acre is acceptable. 1.6 to 3.2 pints/A (0.6 to 1.2 fl oz/1,000 sq ft) of this product is recommended for annuals, 2.4 to 4.2 pints/A (0.9 to 1.6 fl oz/1,000 sq ft) for biennials and easy-to-kill perennials, and 4.2 pints/A (1.6 fl oz/1,000 sq ft) for established perennials. Do not apply more than 8.4 pints of product (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per treated acre per year.

#### BRUSH AND VINE CONTROL

This product may be applied using water or oil and water emulsions in spot application to control undesirable vegetation using handgun or similar types of application equipment. In addition to weed species listed in Tables 1 and 2, these treatments may be used to control or suppress woody plant species listed in Table 5.

#### FOR SPRAYING FOLIAR APPLICATIONS (WATER CARRIER or OIL EMUSLIONS):

- 1. Spray when leaves have reached full size but have not hardened due to drought or maturity.
- 2. Spray individual plants to wet with handgun.
- For larger stems (up to 3" in diameter) and hard to control species, direct spray stream to base of stems to wet the stem at soil surface in addition to wetting the foliage.
- 4. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

#### HIGH VOLUME FOLIAR SPOT APPLICATIONS (WATER CARRIER):

Mix 4.4 to 8.4 pints of this product (2.1 lb 2,4-D ae and 0.7 lb dicamba ae to 4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per acre in sufficient water to insure thorough coverage. When using low-volume application equipment, 3 to 20 gallons of water per acre is acceptable. Spray volume applied will depend on the size and density of the brush to be treated, but do not apply more than 8.4 pints of product (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per treated acre. Direct the spray to treat all foliage, stems, and root collars to wet.

#### BROADCAST APPLICATIONS WITH GROUND EQUIPMENT (WATER CARRIER):

Apply 4.4 to 8.4 pints of this product (2.1 lb 2,4-D ae and 0.7 lb dicamba ae <u>b</u> 4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per acre in sufficient water to insure thorough coverage. When using low-volume application equipment, 3 to 20 gallons of water per acre is acceptable. Spray volume applied will depend on the size and density of the brush to be treated, but do not apply more than 8.4 pints of product (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per treated acre. Spray all foliage, stems, and root collars to wet.

#### FOR DORMANT BASAL APPLICATIONS (OIL EMULSION):

- 1. Increase basal oil content to 15% or 15 gallons of basal oil per 100 gallons of total solution.
- 2. Spray in late winter and early spring before plants break dormancy.
- 3. Spray the bottom 24" of the target stem to wet on all sides.
- 4. For larger stems (up to 3" in diameter) and hard to kill species direct the spray solution to the base of target stems to wet the soil at the stem/soil junction in addition to wetting the stem.
- 5. Do not apply under drip line of desirable trees or adjacent to desirable vegetation.

#### FOR CUT SURFACE TREATMENTS:

Apply this product in an undiluted state as a cut surface treatment to control unwanted trees and prevent sprouts of cut trees.

- Frill or Girdle Treatments: Make a continuous cut or a series of overlapping cuts using an axe to girdle tree trunk. Spray or paint the cut surface with this product.
- <u>Stump Treatments</u>: Spray or paint freshly cut surface with this product. The cambium layer (the area adjacent to the bark) should be thoroughly wet. Treat stumps within 6 hours after cutting.

#### **AERIAL APPLICATIONS**

Aerial applications may be made to control either herbaceous or woody plants. Apply 1.6 to 4.2 pints of this product per acre (for herbaceous weeds) or 4.4 to 8.4 pints of this product per acre (for woody brush and vines) in sufficient water to insure thorough coverage. Coverage is important, so increase spray volume when treating dense stands of brush or weeds. Do not apply more than 8.4 pints of product (4.0 lb 2,4-D ae and 1.3 lb dicamba ae) per treated acre per year.

#### TANK MIX TREATMENTS

READ AND FOLLOW THE LABEL OF EACH TANK MIX PRODUCT USED FOR PRECAUTIONARY STATEMENTS, DIRECTIONS FOR USE, AND OTHER RESTRICTIONS. For broader spectrum control, this product may be tank mixed with other herbicides for noncropland uses (e.g. railroad, highway, pipeline, etc.) including forest management, pastures and rangeland applications, if permitted by product labeling (e.g. 2.4-D). Add water to the spray tank prior to the addition of the tank mix products. Do not premix concentrates.

Due to variations that may occur in formulated products and specific use ingredients (e.g. water supplies) see **COMPATIBILITY TEST FOR MIX COMPONENTS**, prior to actual tank mixing.

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

#### WEEDS LISTED IN THIS LABEL

1A	INUALS	BIENNIALS	BIENNIALS AND PERENNIALS		
Common Name	Scientific Name	Common Name	Scientific Name		
Amaranth, Palmer	Amaranthus palmeri	Bindweed, Field	Convolvulus arvensis		
Beebalm, Spotted	Monarda punctata	Bittercress	Cardamine spp.		
Broomweed, Common	Gutierezia dracunculoides	Buckeye	Aesculus spp.		
Buckwheat, Wild	Polygonum convulvulus	Bullnettle	Cnidosculus stimulosus		
Buffalobur	Solanum rostratum	Carrot, Wild	Daucus carota		
Buttercup, Corn	Ranunculus arvensis	Chicory	Cichorium intybus		
Carpetweed	Mollugo verticillata	Clover, Hop	Trifoleum aureum		
Chickweed, Common	Stellaria media	Dandelion	Taraxacum officinale		
Cockle, Corn	Agrostemma githago	Dock, Curly	Rumex crispus		
Cockle, Cow	Vacaria hispanica	Elderberry	Sambucus canadensis		
Cocklebur, Common	Xanthium strumarium	Goldenrod, Missouri	Solidago missouriensis		
Coreopsis, Plains	Coreopsis tinctoria	Goldenweed, Common	Isocoma coronopifolia		
Croton, Woolly	Croton capitatus	Groundsel	Senecio vulgaris		
Cudweed	Gnaphalium spp	Honeysuckle, Hairy	Lonicera cilosa		
Daisy, English	Bellis perennis	Horsenettle	Solanum caroliniense		
Devilsclaw	Proboscidea luisianica	Ivy, Poison	Rhus radicans		
Dogfennel(Cypressweed)	Eupatorium capillifolium	Knapweed, Black	Centaurea nigra		
Eveningprimrose, Cutleaf	Oenothera lacinata	Knapweed, Russian	Centaurea repens		
Flax	Linum catharticum	Knapweed, Spotted	Centaurea maculosus		
Fleabane, Annual	Erigeron annuus	Marshelder	Ina annua		
Flixweed	Descurainia sophia	Mesquite	Prosopis juliflora		
Hairy Bittercress	Cardamine hirsute	Milkweed, Antelope horn	Asclepias asperula		
Henbit	Lamium amplexicaule	Nightshade, Silverleaf	Solanum elaeagnifolium		
Knawl	Scleranthus anuus	Nightshade, Black	Solanum nigrum		
Knotweed, Prostrate	Polygonum aviculare	Persimmon, Eastern	Diospyros virginiana		
Kochia	Kochia scoparia	Rabbitbrush	Chrysanthemus pulchellus		
Lambsquarters, Common	Chenopodium album	Ragwort, Tansy	Senecio jacobia		
Lettuce, Prickly	Lactuca serriola	Redvine	Brunnichia ovata		
Mallow, Common	Malva neglecta	Sagebrush, Fringed	Artemisia frigida		
Marestail (Horseweed)	Conyza canadensis	Smartweed, Swamp	Polygonum coccineum		
Mayweed	Anthemis cotula	Sorrel, Red (Sheep Sorrel)	Rumex acetosella		
Morningglory, Ivyleaf	Ipomea hederacea	Sowthistle, Perennial	Sonchus arvensis		
Morningglory, Tall	Ipomea purpurea	Spurge, Leafy	Euphorbia esula		
Mouse-ear Cress	Arabidopsis thaliana	Starthistle, Yellow	Centauria solstitialis		

(continued)

# WEEDS LISTED IN THIS LABEL (cont.)

AN	NUALS	BIENNIA	LS AND PERENNIALS
Common Name	Scientific Name	Common Name	Scientific Name
Mustard, Annual	Brassica spp.	Tallow Tree, Chinese	Sapium sebiferum
Mustard, Tansy	Descurainia pinnata	Thistle, Bull	Cirsium vulgare
Pennycress, Field	Thlaspi arvense	Thistle, Canada	Cirsium arvense
Pepperweed, Virginia	Lepidium virginicum	Thistle, Musk	Carduus nutans
Pigweed, Prostrate	Amaranthus blitoides	Thistle, Plumeless	Carduus acanthoides
Pigweed, Redroot	Amaranthus retroflexus	Toadflax, dalmatian	Linaria dalmatica
Pigweed, Smooth	Amaranthus hybridus	Vetch	Vicia spp.
Pigweed, Tumble	Amaranthus albus	Yankeeweed	Eupatorium compositifolium
Poorjoe	Diodia teres		
Purslane, Common	Portulaca oleracea		
Ragweed, Common	Ambrosia artemisiifolia		
Ragweed, Lanceleaf	Ambrosia bidentata		
Ragweed, Western	Ambrosia psilostachya		
Sage, Lanceleaf	Salvia reflexa		
Salsify, Western	Tragopogon dubius		
Sedge	Cyperus compressus		
Shepherd s Purse	Capsella bursa-pastoris		
Smartweed, Pennsylvania	Polygonum pensylvanicum		
Sneezeweed, Bitter	Helenium amurum		
Sowthistle, Annual	Sonchus oleaceus		
Sunflower, Common (Wild)	Helianthus annuus		
Swinecress	Coronopus didymus		
Thistle, Russian	Salsola iberica		
Velvetleaf	Abutilon theophrasti		
Waterhemp, Common	Amaranthus rudis		

#### WEEDS LISTED IN THIS LABEL

WOODY BRUSH AND VINE		WOODY BRUSH AND VINE	
Common Name	Scientific Name	Common Name	Scientific Name
	Scientific Name  Alnus spp. Fraxinus spp. Populus spp. Tilia spp. Fagus spp. Betula spp. Rubus spp. Nyssa spp. Juniperus spp. Prunus spp. Chysolepis spp. Populus spp Parthenocissus quinquefolia Larrea tridentate Magnolia acuminate Rubus spp. Comus spp. Sambucus spp. Ulmus spp. Vitis spp. Smilax spp. Vitis spp. Smilax spp. Crataegus spp. Cicuta spp. Carya spp. Carya spp. Calpha spp. Acalpha spp. Vaccinium spp. Acacia spp. Toxicodendron spp. Pueraria spp. Toxiobius spp. Toxiobius spp. Toxicodendron spp. Populus spp. Robinia spp.		Quercus spp. Toxicodendron diversilobum Elaeagnus angustifolia Diospyros spp. Pinus spp. Prunus spp. Populus spp. Tribulus terrestris Chrysothamnus spp., Ericameria spp. Rubus spp. Juniperus virginiana Brunnichia ovate Rosa bracteata Rosa multifora Artemisia spp. Sassafras albidum Schinus terebinthifolius Schinus terebinthifolius Schinus terebinthifolius Amelanchier spp. Symphoricarpos spp. Picae spp. Rhus spp. Liquidambar styraciflua Acer spp. Flourensia cernua Campsis radican Morella cerifera Salix spp. Hamamelis virginiana Ilex vomitoria
Maple Mesquite	Acer spp.	14004	Yucca spp.

#### FOOD/FFFD CROP USES

This product can be used on the following: Conservation Reserve Program Land\* Fallow Systems (Between Crop Applications)\* General Farmstead\* Grain Sorghum

Grass (Hay or Silage)

Corn (Preplant and Preemergence)

Soybean (Preplant) Cotton (Preplant)

**Pastures** 

Rangeland Wheat

\*These crops are considered Food/Feed crops only when harvested, grazed or foraged. Otherwise, they are considered as non-Food/ Feed uses. Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for Injunction Relief in Washington Toxics Coalition, et.al. v. EPA, C01-0132C (W.D.WA). For further information, please refer to EPA website: http://www.epa.gov/espp.

# STORAGE AND DISPOSAL

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

STORAGE: Do not store below 32° F or above 100° F. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### CONTAINER HANDLING

Note: This product is available in multiple containers. Refer to the Net Contents section of this product 's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size."

Nonrefillable Containers 5 gallons or less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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 or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by state and local authorities.

Nonrefillable Containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. 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. Empty the rinsate into application equipment or a mix tank and to rith several times. Empty the rinsate into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by state and local authorities.

Refillable Containers larger than 5 gallons: 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 a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. If the container cannot be refilled, offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

#### WARRANTY DISCLAIMER

The directions for use of this product must be followed earefully. To THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER AND (2) MANUFACTURER AND SELLER AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE, OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ASSENCE 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. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER, MANUFACTURER AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY REPRESENTATION OR WARNANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS.

#### LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THEIR NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, MANUFACTURER OR SELLER SHALL NOT BE LIABLE TO BUYER OR USER BY WAY OF INDEMNIFICATION TO BUYER OR TO CUSTOMERS OF BUYER, IF ANY, OR FOR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD BY MANUFACTURER OR SELLER TO BUYER. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER HISKS SHALL BE ASSUMED BY THE BUYER, USER, OR ITS CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER SOR USER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY SHALL BE FOR DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT.

If you do not agree with or do not accept any of the directions for use, the warranty disclaimers, or limitations on liability, do not use the product, and return it unopened to the Seller, and the purchase price will be refunded.

RV012925[1]

# WeedMaster® XHL

2.4-D DMA 2.4-D MMA DICAMBA DGA

4 GROUP

HERBICIDE

**HERBICIDE** FOR CONTROL OF BROADLEAF WEEDS IN GRASSES FOR SEED CROPS, GRASSES CUT FOR HAY OR SILAGE, PASTURES AND RANGELAND (HAY, SILAGE), SORGHUM, SUGARCANE, WHEAT, CORN (PREPLANT AND PREEMERGENCE), SOYBEAN\* (PREPLANT), COTTON\* (PREPLANT), BETWEEN CROP APPLICATIONS, CONSERVATION RESERVE PROGRAMS, GENERAL FARMSTEAD, FALLOW SYSTEMS, NON-CROP APPLICATIONS \*Not Registered for Use by California

Active Ingredients:	% by Weight
Dimethylamine salt of 2,4-dichlorophenoxyacetic acid*	35.47%
Monomethylamine salt of 2,4-dichlorophenoxyacetic acid*	
Diglycolamine salt of 3,6-dichloro-o-anisic acid (dicamba)**	18.11%
Other Ingredients	38.02%

<sup>\*</sup>This product contains a total of 3.75 lb 2.4-D acid equivalent per gallon or 36.8% by weight

# KEEP OUT OF REACH OF CHILDREN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.) See Inside Booklet for Precautionary Statements and Directions for Use

For Medical Emergencies, Call (877) 325-1840 For Chemical Spill, Leak, Fire or Exposure, Call CHEMTREC (800) 424-9300

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS DANGER / PELIGRO

Corrosive, Causes irreversible eve damage, Harmful if swallowed. Do not get

Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not ge					
in eyes or on clothing.					
	FIRST AID				
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.     Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.     Call a poison control center or doctor for treatment advice.				
IF SWALLOWED	Immediately call a poison control center or doctor immediately for treatment advice.     Have person sip a glass of water if able to swallow.     Do not induce vomiting unless told to do so by a poison control center or doctor.     Do not give anything by mouth to an unconscious person.				
IF ON SKIN OR CLOTHING	Take off contaminated clothing.     Rinse skin immediately with plenty of water for 15 to 20 minutes.     Call a poison control center or doctor for treatment advice.				
IF INHALED	Move person to fresh air.     If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.     Call a poison control center or doctor for further treatment advice.				
HOTLINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-877-325-1840 for emergency medical treatment information.					
There is no spe signs and symp	ICIAN: This product contains a phenoxy herbicidal chemical. cific antidote. All treatments should be based on observed totens of distress in the patient. Probable mucosal damage may he use of gastric lavage.				

EPA Reg. No. 71368-139

Manufactured for Nufarm, Inc. 11901 S. Austin Avenue Alsip, IL 60803

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal. STORAGE: Do not store below 32° F or above 100° F. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides. PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide. sprav mix, or rinsate is a violation of federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. **CONTAINER** HANDLING: Note: This product is available in multiple containers. Refer to the Net Contents section of this product 's labeling for the applicable "Nonrefillable" or "Refillable" designation. Follow the container handling instructions below that apply to your container type / size. Nonrefillable Containers 5 gallons or less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. 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 or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by state and local authorities. Nonrefillable Containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. 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. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration, or by other procedures approved by state and local authorities. Refillable Containers larger than 5 gallons: 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 a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. If the container cannot be refilled, offer for recycling, if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

<sup>\*\*</sup>This product contains 1.25 lb Dicamba acid equivalent per gallon or 12.3% by weight