

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 21, 2015

Ms. Luz G. Chan Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327

Subject: Notification per PRN 98-10 – Revise the PBN to Drexel Dicamba Herbicide

Product Name: Drexel Dicamba Herbicide EPA Registration Number: 19713-624

Application Date: 06/12/2015 Decision Number: 506197

Dear Ms. Chan:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records. The primary brand name Drexel Dicamba Herbicide has been added to the product record.

If you have any questions, you may contact Karen Samek at (703) 347-8825 or via email at samek.karen@epa.gov.

Sincerely,

Kathryn Montague, Product Manager 23

Herbicide Branch

Registration Division (7505P) Office of Pesticide Programs

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#### NOTIFICATION

19713-624

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

07/21/2015

# Herbicide

Dicamba Agricultural Herbicide

For Weed Control in Corn, Sorghum, Small Grains, Pasture, Hay, Rangeland, General Farmstead (Non-cropland), Rights-of-Way, Public Utility and Industrial Areas, Fallow, Sugarcane, Asparagus, Turf and Grass Seed Crops.

#### **ACTIVE INGREDIENT:**

Dimethylamine salt of Dicamba

(3,6-dichloro-o-anisic acid)*	49.77%
OTHER INGREDIENTS:	50.23%
TOTAL:	100.00%

\* This product contains 41.35% 3,6-dichloro-o-anisic acid (Dicamba) or 4 pounds per gallon (480 g/L).

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

See FIRST AID Below

EPA Reg. No. 19713-624 EPA Est. No. 2217-KS-1

**Net Content:** 2.5 Gals. (9.46 L)

#### **FIRST AID**

#### IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Do not give any liquid to the person.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

#### 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.

#### 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.

- 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.

HOTLINE NUMBER: (Substituted Benzoic Acid) Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency.

#### PRECAUTIONARY STATEMENTS

**Hazards To Humans and Domestic Animals** 

CAUTION: Harmful if swallowed.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some material that is chemical-resistant to this product is natural rubber. If you want more options, follow the instructions for Category A on an EPA chemical-resistance category selection chart.

All mixers, loaders and applicators and other handlers must wear: Long-sleeved shirt and long pants, chemical-resistant gloves (except for applicators using groundboom equipment, pilots and flaggers), shoes plus socks and protective eyewear. (Continued)

#### PRECAUTIONARY STATEMENTS (Cont.)

See Engineering Controls for additional requirements and exceptions. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **ENGINEERING CONTROLS STATEMENTS**

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

Pilots must use cockpits in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for Agricultural Pesticides [40 CFR 170.240(d)(4-6)].

#### **USER SAFETY RECOMMENDATIONS**

Users should: 1) Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) 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**

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

Apply this product only as directed on the label.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.



The DREXEL logo is a registered trademark of Drexel Chemical Company. All other brand names, product names or trademarks belong to their respective holders.

#### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, 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 WPS.

Do not enter or allow worker entry into treated areas during the Restricted Entry Interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls worn over shortsleeved shirt and short pants, chemical-resistant footwear plus socks, chemical-resistant gloves made of any waterproof material, chemicalresistant headgear for overhead exposure and protective eyewear.

#### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are not within the scope of the Worker Protection Standard (WPS) for Agricultural Pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter or allow others to enter treated areas until sprays have dried.

Before applying this product, read all directions and precautions appearing on this label. Failure to follow all directions and precautions may result in unsatisfactory Weed control, crop injury or illegal residues.

#### **INFORMATION**

The following directions apply to all uses of this product. Additional precautions and restrictions will be found in each specific use section. Do not treat irrigation ditches or water used for crop irrigation or domestic uses.

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

#### Mixing and Application

UNLESS OTHERWISE SPECIFIED UNDER THE INDIVIDUAL USE HEADING OF THIS LABEL, THE FOLLOWING DIRECTIONS APPLY TO ALL CROP AND NON-CROP USES OF THIS PRODUCT. REFER TO INDIVIDUAL USE SECTIONS FOR ADDITIONAL PRECAUTIONS, RESTRICTIONS, APPLICATION RATES AND TIMINGS.

This product is a water-soluble formulation that can be applied using water or sprayable fluid fertilizer as the carrier. If a fluid fertilizer is to be used, a compatibility test (see the "COMPATIBILITY TEST" section of this label) should be made prior to tank-mixing.

Ground or aerial application equipment which will give good spray coverage of Weed foliage should be used. However, do not use aerial application equipment if spray particles can be carried by wind into areas where sensitive crops or plants are growing or when temperature inversions exist.

Apply 3 to 50 gallons of a diluted spray per treated acre when using ground application equipment or 1 to 10 gallons of a diluted spray per treated acre (2 to 20 gallons of diluted spray per acre for pre-harvest uses) in a water-based carrier when using aerial application equipment. Use the higher level of the listed spray volumes when treating dense or tall vegetation. Use coarse sprays.

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.

To avoid uneven spray coverage, this product should not be applied during periods of gusty wind or when wind is in excess of 15 mph. Avoid disturbing (e.g., cultivating or mowing) treated areas for at least 7 days following application.

#### **Best Stewardship Practices**

This product provides effective Broadleaf weed and brush control when properly applied. Best stewardship practices in all mixing, loading and application operations not only maximize Weed control, but also protect ground and surface waters and minimize off-target movement.

This chemical is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

#### **GROUND AND SURFACE WATER PROTECTION**

1. Point source contamination – To prevent point source contamination, do not mix or load this pesticide product within 50 feet of wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams and rivers and natural or impounded lakes and reservoirs. Do not apply pesticide product within 50 feet of wells. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pad or properly diked mixing/loading areas as described below.

Mixing, loading, rinsing or washing operations performed within 50 feet of a well are allowed only when conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be on or moved across the pad. The pad must be self-contained to prevent surface water flow over or from the pad. The pad capacity must be maintained at 110% that of the largest pesticide container or application equipment used on the pad and have sufficient capacity to contain all product spills, equipment or container leaks, equipment washwaters and rainwater that may fall on the pad. The containment capacity does not apply to vehicles delivering pesticide shipments to the mixing/loading site. States may have in effect additional requirements regarding wellhead setbacks and operational containment.

Care must be taken when using this product to prevent: a) back siphoning into wells, b) spills or c) improper disposal of excess pesticide, spray mixtures or rinsates. Check valves or antisiphoning devices must be used on all mixing equipment.

- 2. Movement by surface runoff or through soil Do not apply under conditions which favor runoff. Do not apply to impervious substrates such as paved or highly compacted surfaces in areas with high potential for groundwater contamination. Groundwater contamination may occur in areas where soils are permeable or coarse and groundwater is near the surface. Do not apply to soils classified as Sand with less than 3% organic matter and where groundwater depth is shallow. To minimize the possibility of groundwater contamination, carefully follow specified application rates as affected by soil type in the "INFORMATION" section of this label.
- 3. Movement by water erosion of treated soil Do not apply or incorporate this product through any type of irrigation equipment nor by flood or furrow irrigation. Ensure treated areas have received at least 0.5 inch of rainfall (or irrigation) before using tailwater for subsequent irrigation of other fields.

#### **SENSITIVE CROP PRECAUTIONS**

This product may cause injury to desirable trees and plants, particularly Beans, Cotton, Flowers, Fruit trees, Grapes, Ornamentals, Peas, Potatoes, Soybeans, Sunflowers, Tobacco, Tomatoes and other Broadleaf plants when contacting their roots, stems or foliage. These plants are most sensitive to this product during their development or growing stage. Follow the precautions listed below when using this product.

- Do not treat areas where either possible downward movement into the soil or surface washing may cause contact of this product with the roots of desirable plants such as trees and shrubs.
- Avoid making applications when spray particles may be carried by air currents to areas where sensitive crops and plants are growing, or when temperature inversions exist. Do not spray near sensitive plants if wind is gusty or in excess of 5 mph and moving in the direction of adjacent sensitive crops. Leave an adequate buffer zone between area to be treated and sensitive plants. Coarse sprays are less likely to drift out of the target area than fine sprays.
- Use coarse sprays to avoid potential herbicide drift. Select nozzles which are designed to produce minimal amounts of fine spray particles. Examples of nozzles designed to produce coarse spray via ground applications are Delavan Raindrops, Spraying Systems XR flat fans or large capacity flood nozzles such as D10, TK10 or greater capacity tips. Keep the spray pressure at or below 20 psi and the spray volume at or above 20 gpa, unless otherwise required by the manufacturer of drift-reducing nozzles. Consult with your spray nozzle supplier concerning the choice of drift-reducing nozzles.
- Agriculturally approved drift-reducing additives may be used.
- Do not apply this product adjacent to sensitive crops when the temperature on the day of application is expected to exceed 85°F, as drift is more likely to occur.
- To avoid injury to desirable plants, equipment used to apply this product should be thoroughly cleaned (see "PROCEDURE FOR CLEANING SPRAY EQUIPMENT" section of this label) before reusing to apply any other chemicals.

All crop uses of this product are intended for a normal growing interval between planting and harvest. No crop rotation restrictions exist if normal harvest of treated crop has occurred. If this interval is shortened, such as in cover crop that will be plowed under, do not follow up with the planting of a sensitive crop.

Crops growing under stress conditions such as drought, poor fertility or foliar damage due to hail, wind or insects, can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Consult your local or State authorities for possible application restrictions and advice concerning these and other special local use situations. TANK-MIX DIRECTIONS ARE FOR USE ONLY IN STATES WHERE THE TANK-MIX PRODUCT AND APPLICATION SITE ARE REGISTERED.

#### **BAND TREATMENTS**

This product may be applied as a band treatment. Use the formula below to determine the appropriate rate and volume per acre.

Band width in inches X **Broadcast RATE** Band RATE per Row width in inches per treated acre treated acre Band width in inches X Broadcast VOLUME Band VOLUME per treated acre Row width in inches per treated acre

#### **COMPATIBILITY TEST**

Before mixing in the spray tank, it is advisable to test compatibility by mixing all components in a small container in proportionate quantities (see following table).

Amount of Herbicide to Add to One Pint of Spray Carrier (Assuming Volume is 25 Gallons per Acre)			
Herbicide Formulations Rate Per Acre Level Teaspoons			
Dry	1 lb.	1.5	
Liquid	1 pt.	0.5	

If herbicide(s) do not ball up or form flakes, sludge, gels, oily films or layers or other precipitates, then the tested spray mix is compatible. Usually, incompatibility in any of the above described forms will occur within 5 minutes after mixing.

If components are incompatible, the use of a compatibility agent is recommended. Re-run the above compatibility test with a suitable compatibility agent (0.25 teaspoon is equivalent to 2 pints per 100 gallons of fluid fertilizer).

#### PROCEDURE FOR CLEANING SPRAY EQUIPMENT

The steps listed below are suggested for thorough cleaning of spray equipment following applications of this product or tank-mixes of this product or tank-mixes of this product plus 2,4-D Amine.

- 1. 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 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, preferably 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

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. This product tank-mixed with waterdispersible formulations requires the use of a water/detergent 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 sprayer system for 2 to 10 minutes and discharge a small amount of the 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.

#### **GENERAL WEED LIST**

This is a general list of Weeds which may be treated with this product in accordance with this label as specified under the rates and timing sections of the individual use headings. Proper usage of this product will give control or growth suppression of many annual, biennial, perennial Broadleaf and many Woody brush and Vine species, including:

#### **Annuals**

Amaranth, Spiny (Spiny Pigweed) Aster, Slender Bedstraw Beggarweed, Florida Broomweed, Common Buckwheat, Wild Buffalobur Burclover, California Burcucumber Buttercup, Roughseed Carpetweed Catchfly, Nightflowering Chamomile, Corn Chickweed, Common Clovers (Annual) Cockle, Corn Cockle, Cow Cocklebur, Common Croton, Tropic Croton, Woolly Daisy, English Evening primrose, Cutleaf Fleabane, Annual

Goosefoot, Nettleleaf Henbit Jimsonweed

Knotweed Kochia Ladysthumb

Lambsquarters, Common
Lambsquarters (Triazine resistant) Lettuce, Prickly

Mallow. Venice Mayweed Morningglory, Ivyleaf Morningglory, Tall Mustard, Tansy Mustard, Wild Mustard, Yellowtops

Knapweed, Spotted

Mallow, Dwarf

Mallow, Common

Nightshade, Black Pennycress, Field

(Fanweed, Frenchweed, Stinkweed) Pepperweed, Virginia (Peppergrass)

Pigweed, Prostrate Pigweed, Redroot (Carelessweed)

Pigweed, Rough Pigweed, Smooth Pigweed (Triazine resistant)

Pigweed, Tumble Poorjoe Puncturevine Purslane, Common Pusley, Florida Radish, Wild Ragweed, Common

Ragweed, Giant (Buffaloweed) Ragweed, Lance-leaf

Rubberweed, Bitter (Bitterweed) Sesbania, Hemp

Shepherdspurse Sicklepod Sida, Prickly (Teaweed)

Smartweed, Green Smartweed, Pennsylvania Sneezeweed, Bitter Sowthistle, Annual Sowthistle, Spiny Spikeweed, Common Spurge, Prostrate Spurry, Corn Starbur, Bristly Sumpweed, Rough Sunflower, Common (Wild) Sunflower, Volunteer Thistle, Russian Velvetleaf Waterhemp Waterprimrose, Winged

#### **Biennials**

Burdock, Common Carrot, Wild (Queen Anne's Lace) Cockle, White Evening primrose, Common Geranium, Carolina Gromwell Knapweed, Diffuse

Plantain, Bracted Ragwort, Tansy Starthistle, Yellow Sweetclover Teasel Thistle, Bull Thistle, Milk Thistle, Musk Thistle, Plumeless

Wormwood, Annual

#### **Perennials**

\*Alfalfa Artichoke, Jerusalem Aster, Spiny Aster, Whiteheath Bedstraw, Smooth Bindweed, Field Bindweed, Hedge Blueweed Texas

\*Bursage (Bur Ragweed) (Lakeweed)

(Povertyweed)

Bursage, Woollyleaf (Lakeweed) Buttercup, Tall

Campion, Bladder Chickweed, Field

Chickweed (Mouseear, Canada) Chicory \*Clover, Hop

\*Dandelion, Common \*Dock, Broadleaf (Bitterdock) \*Dock, Curly

Dogbane, Hemp \*Dogfennel (Cypressweed) Fern. Bracken

Garlic, Wild Goldenrod, Canada Goldenrod, Missouri Goldenweed, Common Hawkweed

Ironweed Knapweed, Black Knapweed Russian Marestail (Horseweed)

Horsenettle, Carolina

Milkweed, Climbing Milkweed, Common Milkweed, Honeyvine Milkweed, Western Whorled Nettle, Stinging Nightshade, Silverleaf (White

Horsenettle) Onion, Wild \*Plantain, Broadleaf Plantain, Buckhorn Pokeweed Ragweed, Western Redvine Sericia Lespedeza

Smartweed, Swamp Snakeweed, Broom \*Sorrel, Red (Sheep Sorrel) Sowthistle

Sowthistle, Perennial

Spurge, Leafy Sundrop, Halfshrub (Evening Primrose)

Thistle, Canada Toadflex, Dalmation Tropical Soda Apple Trumpetcreeper (Buckvine)

Vetch

Waterhemlock Waterprimrose, Creeping \*Woodsorrel, Creeping Common Yellow Wormwood, Common Wormwood, Louisiana \*Yankeeweed Yarrow, Common

Perennials may be controlled using this product at rates lower than those specified for other listed perennial Weeds. (See "APPLICATION RATES AND TIMINGS" sections.)

Woody				
Alder Ash Aspen Basswood Beech Birch *Blackberry *Blackgum *Cedar Cherry Chinquapin Cottonwood *Creosotebush Cucumbertree *Dewberry *Dogwood Elm Grape *Hawthorn (Thornapple)	Hemlock Hickory Honeylocust Honeysuckle Hornbeam Huckleberry Huisache Ivy, Poison Kudzu Locust, Black Maple Mesquite Oak, Poison Olive, Russian Persimmon, Eastern Pine *Plum, Sand (Wild Plum) Poplar	Rabbitbrush *Redcedar, Eastern *Rose McCartney *Rose Multiflora Sagebrush, Fringe Sassafras Serviceberry Spicebush Spruce Sumac *Sweetgum Sycamore Tarbush Willow Witch hazel *Yaupon *Yucca		

\* Growth suppression

#### CORN (FIELD, POP\*, SEED\*, SILAGE)

Observe all precautions and read and follow mixing, application and cleaning instructions on this label, as well as the following:

\*DO NOT apply this product to Seed corn or Popcorn without first verifying with your local Seed corn company (supplier) the selectivity of this product on your inbred line or variety of Popcorn. This precaution will help avoid potential injury of sensitive varieties.

This product is not registered for use on Sweet corn.

Direct contact of this product with Corn seed must be avoided. If Corn seeds are less than 1.5 inches below the surface, delay application until Corn has emerged.

Up to 2 applications of this product may be made during a growing season. Do not exceed a total of 1.5 pints (0.75 lb. a.e.) of this product per treated acre per crop year. Allow two weeks or more between application of this product. For combination options or sequential treatments, refer to appropriate section.

Applications of this product to Corn during periods of rapid growth may result in temporary leaning. Corn will usually become erect within 3 to 7 days. Cultivation should be delayed until after Corn is growing normally to avoid breakage.

Agriculturally approved surfactants or sprayable fertilizer (0.5 to 1 gallon per acre of 28%, 30%, 32% urea Ammonium nitrate or 2.5 pounds per acre spray-grade Ammonium sulfate\*) may be added to the spray mixture to improve post-emergence Weed control, particularly in dry growing conditions.

Do not use adjuvants containing penetrants such as petroleum-based oils after crop emergence or crop injury may result.

Corn may be harvested or grazed for feed once the crop has reached the ensilage (milk) stage or later in maturity.

Several synthetic Pyrethroid insecticides are labeled for tank-mix applications with this product. Refer to their label for specific directions. \*Not for use in California

#### **WEEDS CONTROLLED**

This product will control many annual Broadleaf weed or give growth suppression of many perennial Broadleaf weeds commonly found in Corn. (Refer to the "GENERAL WEED LIST".)

For best performance, make application when Weeds have emerged and are actively growing.

Pre-emergence control of Cocklebur, Velvetleaf and Jimsonweed may be reduced if conditions such as low temperature or lack of soil moisture cause delayed or deep germination of Weeds.

#### PRE-PLANT/PRE-EMERGENCE IN NO-TILLAGE CORN

Applications of this product may be made before, during or after planting to emerged and actively growing Broadleaf weeds. Apply this product at 1 pint per treated acre on *medium* or *fine textured soils* 

containing 2% or greater organic matter. Use 0.5 pint per treated acre on coarse textured soils (Sand, Sandy loam and Loamy sand) or medium and fine textured soils with less than 2% organic matter. When planting into a Legume sod (e.g., Alfalfa or Clover), apply this product after 4 to 6 inches of regrowth has occurred.

### PRE-EMERGENCE IN CONVENTIONAL OR REDUCED TILLAGE CORN

This product may be applied after planting and prior to Corn emergence. Application at 1 pint per treated acre may be made to medium or fine textured soils which contain 2% or greater organic matter. DO NOT apply to coarse textured soil (Sand, Sandy loam and Loamy sand) until after crop emergence (see "EARLY POST-EMERGENCE" uses below).

Pre-emergence application of this product does not require mechanical incorporation to become active. A shallow mechanical incorporation is recommended if application is not followed by adequate rainfall or sprinkler irrigation. Avoid tillage equipment (e.g., drags, harrows) which concentrate treated soil over seed furrow.

## EARLY POST-EMERGENCE (ALL TILLAGE SYSTEMS) Spike through 8 inch tall Corn:

This product at 1 pint per treated acre may be applied during the period from Corn emergence through the 5 leaf stage or 8 inches tall, whichever comes first. Reduce the rate to 0.5 pint per treated acre if Corn is growing on *coarse textured soils* (Sand, Sandy loam and Loamy sand). See late post-emergence application rates below if the 6th true leaf is emerging from whorl, or Corn is greater than 8 inches tall.

### LATE POST-EMERGENCE (ALL TILLAGE SYSTEMS) 8 to 36 inch tall Corn:

Application of this product at 0.5 pint per treated acre may be made from 8 to 36 inch tall Corn or 15 days before tassel emergence, whichever comes first. For best performance, make applications when Weeds are less than 3 inches tall.

Make directed spray application when: 1) Corn leaves prevent proper spray coverage; 2) sensitive crops are growing nearby; 3) tank-mixing with 2,4-D.

DO NOT apply this product when Soybeans are growing nearby if any of these conditions exist:

- Corn is more than 24 inches tall
- Soybeans are more than 10 inches tall
- Soybeans have begun to bloom

#### **OVERLAY (SEQUENTIAL) TREATMENTS**

This product may be applied to ground previously treated with one or more of the following herbicides:

Acetochlor (Surpass®, Harness®)	Glyphosate (Roundup®)	
Alachlor (Lasso*)	Halosulfuron (Permit®)	ı
Atrazine	Lariat®	ı
Bicep II Magnum®	Marksman <sup>®</sup>	ı
Bullet	S-metolachlor (Dual II Magnum®)	ı
Butylate (Sutan+®)	Paraguat (Gramoxone®)	ı
Clarity® Dimethenamid (Frontier®)	Pendimethalin (Prowl®)	ı
EPTC (Eradicane®)	Simazine (Princep®)	ı
Guardsman®	Surpass®	
Guarasman	Sui puss	1

Apply this product at 0.5 pint per treated acre to ground previously treated with full rates of Clarity and Marksman herbicides. Total Dicamba a.e. applied from all sources must not exceed 1.0 pound a.e. per acre. Allow at least 2 weeks between applications. No more than 2 total applications of Dicamba from any source may be made per year. Read and follow label directions for each of the above products.

#### **Tank-Mix Treatments**

This product may be tank-mixed with one or more of, but not limited to, the following herbicides for control of Grasses or additional Broadleaf weeds in Corn. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, rates and timings and other restrictions.

#### **RATES AND TIMINGS**

This Product Plus	Pre-plant/ Pre-emergence (No Tillage Corn)	Pre-emergence (Conventional or Reduced Tillage Corn)	Early Post-emergence (All Tillage Systems)	Late Post-emergence (All Tillage Systems)	Additional Directions
Accent® (Nicosulfuron)	_	_	0.5 to 1 ounce a.i./Ac.	0.5 to 1 ounce a.i./Ac. (To improve spray coverage of Weeds and reduce risk of Corn injury, use drop pipes to direct spray beneath Corn leaves when Corn is greater than 8 inches tall.)	emerged Weeds before Corn is greater than 24 inches tall. Use non-ionic surfactant at 0.25%
(Continued)					

(Cont.)					
This Product Plus	Pre-plant/ Pre-emergence (No Tillage Corn)	Pre-emergence (Conventional or Reduced Tillage Corn)	Early Post-emergence (All Tillage Systems)	Late Post-emergence (All Tillage Systems)	Additional Directions
Atrazine	1.25 to 2 lbs. a.i./Ac.	1.25 to 2 lbs. a.i./Ac.	1.25 to 2 lbs. a.i./Ac. Crop oil concentrates may be used with this mixture if Corn is 5 inches or less in height.	1.25 to 2 lbs. a.i./Ac. Do not apply if Corn is greater than 12 inches tall.	Application may be made before Grasses are 1.5 inches tall. Follow all State and Federal restrictions pertaining to Atrazine applications.
Beacon® (Primisulfuron)	_	_	0.31 to 0.62 oz. a.i./Ac.	0.31 to 0.62 oz. a.i./Ac. (To improve spray coverage of Weeds and reduce risk of Corn injury, use drop pipes to direct spray beneath Corn leaves when Corn is greater than 8 inches tall.)	Application may be made to emerged Weeds when Corn is 4 to 24 inches tall. Use non-ionic surfactant at 0.25% (V/V) with this tank-mixture.
DUAL II Magnum/ DUAL II Magnum SL (Metolachlor)	0.8 to 1.6 lbs. a.i./Ac.	0.8 to 1.6 lbs. a.i./Ac. (Use only on fine or medium textured soils with 2.5% or greater organic matter.)	0.8 to 1.6 lbs. a.i./Ac.	_	Application may be made before Grasses reach the 2 leaf stage and before Corn is greater than 3 inches tall.
Frontier® (Dimethenamid)	13 to 25 fl. ozs./Ac.	13 to 25 fl. ozs./Ac. (Use only on fine or medium textured soil with 2.5% or greater organic matter.)	13 to 25 fl. ozs./Ac.	_	Application may be made up to 8 inch tall Corn. This treatment must be combined with a herbicide that provides post-emergence control of Grass weeds if they are greater than 1 inch tall at the time of application.
Gramoxone (Paraquat)	0.25 to 1 lb. a.i./Ac.	0.25 to 1 lb. a.i./Ac.	_	_	Application may be made to emerged Weeds but prior to Corn emergence.
Harness or Surpass (Acetochlor)	1.5 to 3 lbs. a.i./Ac.	1.5 to 3 lbs. a.i./Ac. (Use only on fine or medium textured soil with 2.5% or greater organic matter.)	_	_	Application should be made prior to Corn emergence.
Lasso (Alachlor)	1.5 to 4 lbs. a.i./Ac.	1.5 to 4 lbs. a.i./Ac. (Use only on fine textured soil with greater than 2.5% organic matter.)	1.5 to 4 lbs. a.i./Ac.	_	Application may be made before Grasses reach the 2 leaf stage and before Corn is more than 3 inches tall. If microencapsulated forms of Alachlor are used (Lasso MT, Partner*), applications must be made prior to Grass emergence.
Princep (Simazine)	2 to 3 lbs. a.i./Ac.	2 to 3 lbs. a.i./Ac.	_	_	Application may be made prior to Corn or Weed emergence.
Prowl (Pendimethalin)	_	0.75 to 1.5 lbs. a.i./ Ac. (Use only on fine or medium textured soil with 2.5% or greater organic matter.)	0.75 to 1.5 lbs. a.i./Ac.	_	Application may be made immediately after planting but prior to Weed emergence. Corn should not be beyond the 2 leaf stage of growth.
Roundup (Glyphosate)	1 to 3 lbs. a.i./Ac.	1 to 3 lbs. a.i./Ac.	_	_	Application may be made to emerged Weeds but prior to Corn emergence.
2,4-D	0.25 to 0.5 lb. a.i./Ac.	0.25 to 0.5 lb. a.i./Ac.	Do not use at this application timing.	0.125 lb. a.i./Ac.	Drop pipes are to be used when Corn height is 8 inches or greater. Keeping the spray off the Corn leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of the Weed foliage.

#### **COTTON (EXCEPT CALIFORNIA)**

**Pre-plant Application:** Apply up to 8 fluid ounces of this product per acre to control emerged Broadleaf weeds prior to planting Cotton in conventional or conservation tillage systems.

For best performance, apply this product when Weeds are in the 2 to 4 leaf stage and rosettes are less than 2 inches across.

Following application of this product and a minimum accumulation of 1 inch of rainfall or overhead irrigation, a waiting interval of 21 days is required per 8 fluid ounces per acre or less. These intervals must be observed prior to planting Cotton.

DO NOT apply pre-plant to Cotton West of the Rockies.

DO NOT make pre-plant applications of this product to geographic areas with an average annual rainfall less than 25 inches.

If applying a Spring pre-plant treatment following application of a Fall pre-plant (post-harvest) treatment, the combination of both treatments may not exceed 4 pints of this product (2 lbs. a.e.) per year.

#### **Tank-Mix Treatments**

For control of Grasses or additional Broadleaf weeds, this product may be tank-mixed with Bladex®, Caparol®, Gramoxone Extra and Roundup herbicides.

#### SORGHUM (MILO)

Observe all precautions on this label, including the reference to crops growing under stress.

Read and follow mixing, application and cleaning instructions on this label. 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.

DO NOT graze or feed treated Sorghum forage or silage prior to mature Grain stage.

**Pre-harvest Interval (PHI) Restrictions are as follows:** Grain sorghum—30 days; Fodder—30 days; Forage—20 days.

If Sorghum is grown for Pasture or Hay, refer to the Pasture use section of this label. Do not apply this product to Sorghum grown for seed production.

Make no more than one application per growing season.

#### WEEDS CONTROLLED

This product, when applied at the specified rate for Sorghum, will control many actively growing annual Broadleaf weeds and will reduce competition from established perennial Broadleaf weeds, as well as control their seedlings. (Refer to the "GENERAL WEED LIST" section.)

#### **RATES AND TIMINGS**

This product may be applied to emerged and actively growing Weeds at least 15 days prior to planting. Post-emergence application of this product must be made after Sorghum is in the spike stage (all Sorghum emerged), but before Sorghum is 15 inches tall. For best performance, make applications when Sorghum is in the 3 to 5 leaf stage and Weeds are small (less than 3 inches tall). Use drop pipes (drop nozzles) if Sorghum is taller than 8 inches. Keeping the spray off the Sorghum leaves and out of the whorl will reduce the likelihood of crop injury and improve spray coverage of Weed foliage.

Broadcast Rate Per Treated Acre: 0.5 pint (0.25 lb. a.e.)

#### **Tank-Mix Treatments**

#### This Product plus Atrazine

For improved control of emerged, actively growing Broadleaf weeds including Triazine resistant species and added suppression of perennial Broadleaf weeds, tank-mix 0.5 pint of this product with 0.5 to 1.25 lbs. a.i. Atrazine per treated acre. For control of Grasses (less than 1.5 inches tall), tank-mix 0.5 pint of this product with 2 pounds a.i. Atrazine per treated acre. For best performance and minimal crop injury, make application when Sorghum is 3 to 8 inches and when Broadleaf weeds are small (less than 6 inches tall). Application of Atrazine must be made before Sorghum is beyond 12 inches in height. The Atrazine rate will depend upon soil texture and length of residual Weed control desired.

Follow all State and Federal restrictions pertaining to Atrazine applications.

#### This Product plus Buctril®

For improved control of Broadleaf weeds, tank-mix 0.5 pint of this product with 1 to 1.5 pints (0.25 to 0.375 lb. a.i./Ac.) Buctril Herbicide per treated acre. Make application at 4 leaf to 15 inch tall Sorghum. Use drop nozzles to direct spray beneath Sorghum leaves when Sorghum is greater than 8 inches in height.

READ AND FOLLOW THE LABEL OF EACH TANK-MIX PRODUCT USED FOR PRECAUTIONARY STATEMENT, DIRECTIONS FOR USE, APPLICATION RATES AND TIMINGS AND OTHER RESTRICTIONS.

#### **OVERLAY (SEQUENTIAL) TREATMENTS**

This product may be applied to ground previously treated with one or more of the following herbicides:

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Herbicide	Maximum Rate Per Treated Acre (Lbs. a.i.)
Atrazine*	2.5
S-metolachlor (Dual II Magnum) (Concep® treated seed)	1.33

<sup>\*</sup> Maximum use rate for Atrazine is determined by soil type, tillage practices used, surface residue and State or local restrictions. Follow the more restrictive requirements when determining the maximum use rate for Atrazine.

#### **PRE-HARVEST USES**

#### For Use Only in the States of Texas and Oklahoma

This product may be applied for Weed suppression any time after the Sorghum has reached the soft dough stage. An agriculturally approved surfactant may be used to improve performance. For aerial applications, use at least 2 gallons of water-based carrier per treated acre. Delay harvest until 30 days after treatment.

Broadcast Rate Per Treated Acre: 0.5 pint (0.25 lb. a.e.)

## SMALL GRAINS (WHEAT, BARLEY AND OATS) NOT UNDERSEEDED TO LEGUMES IMPORTANT

Observe all precautions and read and follow cleaning, mixing and application instructions on this label.

Pre-harvest Interval (PHI) Restriction: for Grain is 7 days.

If small Grains are used for Pasture hay, the following restrictions apply:

- Animals cannot be removed from treated area for slaughter prior to 30 days after last application.
- There is no waiting period between treatment and grazing for nonlactating dairy animals.
- Treated areas may not be grazed by lactating dairy animals before 7 days after treatment.
- DO NOT harvest Hay from treated areas before 37 days after treatment.
   NOTE: Observe all precautions and restrictions on the labels of products used in tank-mix treatments.

#### **WEEDS CONTROLLED**

This product, or combinations with listed tank-mix partners, will provide control or suppression of annual Broadleaf weeds listed below. For improved control of listed Weeds, this product may be applied in a tank-mix with other herbicides. Refer to specific tank-mix options.

Mustard, Treacle<sup>1</sup> Bedstraw, Catchweed1 Bindweed, Field<sup>2</sup> Mustard, Tumble (Jim Hill)1 Buckwheat, Tartary Mustard, Wild1 Nightshade, Black Buckwheat, Wild Nightshade, Cutleaf Carpetweed1 Nightshade, Silverleaf<sup>2</sup> (White Horsenettle) Chamomile, Corn Chervil, Bur Pennycress, Field (Fanweed, Frenchweed, Stinkweed) Chickweed, Common<sup>1</sup> Pepperweed, Peppergrass<sup>1</sup>
Pigweed, Redroot (Carelessweed) Cockle, Corn Cockle, Cow Pigweed, Rough Cocklebur, Common Cornflower (Bachelorbutton)<sup>1</sup> Dandelion, Common<sup>2</sup> Pigweed, Tumble Pineappleweed<sup>1</sup> Plantain, Broadleaf<sup>2</sup> Poppy, Red Horned<sup>1</sup> Puncturevine<sup>1</sup> Dock, Curly<sup>2</sup> Dragonhead, American<sup>1</sup> Evening Primrose, Cutleaf Purslane, Common<sup>1</sup> Falseflax, Smallseeded1 Fiddleneck (Tarweed)1 Radish, Wild1 Ragweed, Common<sup>1</sup> Flixweed Fumitory<sup>1</sup> Ragweed, Giant (Buffaloweed)1 Gromwell, Corn1 Rocket, London<sup>1</sup> Groundsel, Common<sup>1</sup> Rocket, Yellow<sup>1</sup> Salsify (Goatsbeard)<sup>1</sup> Hempnettle<sup>1</sup> Henhit Sherpherdspurse<sup>1</sup> Jacobs Ladder1 Smartweed, Green Knawel (German Moss) Smartweed, Pennsylvania Knotweed, Prostrate Sorrel, Red (Sheep Sorrel)1 Kochia Sowthistle, Annual Ladysthumb Starthistle, Yellow Lambsquarters, Common Sunflower, Common (Wild) Lettuce, Miners Thistle, Canada2 Lettuce, Prickly Thistle, Russian Mallow, Common Yarrow, Common<sup>2</sup> Mayweed, Chamomile (Dogfennel)<sup>1</sup> Velvetleaf Mustard, Blue (Purple)

Mustard, Tansy

- <sup>1</sup> These Weeds will be controlled with tank-mixtures of this product. Refer to tank-mix label for specific Weeds controlled.
- <sup>2</sup> Tank-mixes of this product will provide suppression of established Broadleaf weeds and control of their seedlings.

#### RATES AND TIMINGS

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Application of this product may be made before, during or after planting small Grains. For best performance, make applications when Weeds are in the 2 to 3 leaf stage and rosettes are less than 2 inches across. Application of this product to small Grains during period of rapid growth may result in crop leaning. This condition is temporary and will not reduce crop yields.

Use this product at 2 to 4 fluid ounces per treated acre in Wheat, Fall seeded Barley and Oats, and at 2 to 3 fluid ounces per treated acre in Spring seeded Barley. Use the higher level of listed rate ranges when treating difficult-to-control Weeds such as Kochia, Russian thistle and Prickly lettuce or dense vegetative growth.

This product used in a tank-mix with other herbicides offers the best spectrum of Weed control and herbicide tolerant or resistant Weed management. Refer to specific crop for rate and application timing of this product.

For applications prior to the emergence of Weeds or when Sulfonylurea-resistant Weeds are present or suspected, use a minimum of 3 fluid ounces per treated acre of this product with a tank-mix herbicide. Non-sulfonylurea herbicides such as 2,4-D or MCPA tank-mixed with this product will offer more consistent control of Sulfonylurea-resistant weeds. When mixing with Sulfonylurea herbicides, such as Ally®, Amber®, Express®, Finesse®, Glean® and Harmony® Extra, use an agriculturally approved surfactant of at least 80% active ingredient at the rate of 1 to 4 pints per 100 gallons of spray or not more than 0.25 to 0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank-mix and/or when treating more mature and difficult-to-control Weeds or dense vegetative growth.

#### **FALL AND SPRING SEEDED WHEAT**

THIS PRODUCT MUST BE APPLIED TO FALL SEEDED WHEAT PRIOR TO THE JOINTING STAGE. APPLICATIONS TO SPRING SEEDED WHEAT MUST BE MADE BEFORE WHEAT EXCEEDS THE 5 LEAF STAGE. Early developing Wheat varieties such as TAM 107, Madison or Wakefield must receive application between early tillering and the jointing stage. Care should be taken in staging these varieties to be certain that the application occurs prior to the jointing stage.

#### **Tank-Mix Treatments**

This product may be tank-mixed with one or more of, but not limited to, the following herbicides. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, Weeds controlled and geographic and other restrictions.

#### **Broadcast Rate Per Treated Acre:**

Apply 2 to 4 fluid ounces of this product with:

Product	Active Ingredient	Formulation	Amount of Product per Acre
2,4-D Amine or Ester	2,4-D	4 lbs./gal.	8 to 12 fl. ozs. (0.25 to 0.375 lb. a.i./Ac.) <sup>1</sup>
MCPA Amine or Ester	МСРА	4 lbs./gal.	8 to 12 fl. ozs. (0.25 to 0.375 lb. a.i./Ac.) <sup>1</sup>
Ally	Metsulfuron-methyl	60% DF	1/10 oz.
Amber	Triasulfuron	75% DF	0.28 oz.
Express	Thifensulfuron + Tribenuron-methyl	75% DF	1/6 oz.
Harmony Extra	Thifensulfuron + Tribenuron-methyl	75% DF	1/3 oz.
Buctril	Bromoxynil <sup>2</sup>	2 lbs./gal.	1 to 1.5 pts.
Bronate®	Bromoxynil + MCPA	4 lbs./gal.	1 to 2 pts.
Curtail®	Clopyralid + 2,4-D	2.38 lbs./gal.	2 to 2.66 pts.
Stinger®	Clopyralid	3 lbs./gal.	0.25 to 0.33 pt.
Karmex <sup>®3</sup>	Diuron <sup>2</sup>	80% DF	0.5 to 1.5 lbs.
Sencor®3	Metribuzin <sup>2</sup>	75% DF	1 to 10 ozs.

When using formulations other than 4 lbs./gal., use lbs. active per acre listed.
 Herbicides with the same active ingredient and/or different formulation may be used.

## SPECIAL USE TANK-MIXES FOR SPRING AND FALL SEEDED WHEAT (See Footnotes For Applicable Uses)

Apply 3 to 41 fluid ounces of this product with:

Product <sup>2</sup>	Active Ingredient	Formulation	Amount of Product per Acre
2,4-D or MCPA Amine	2,4-D or MCPA	4 lbs./gal.	1 to 2 pts. <sup>3</sup> (0.5 to 1 lb. a.i./Ac.) <sup>4</sup>
2,4-D or MCPA Ester	2,4-D or MCPA	4 lbs./gal.	1 to 1.5 pts. <sup>3</sup> (0.5 to 0.75 lb. a.i./Ac.) <sup>4</sup>
Ally	Metsulfuron-methyl	60% DF	1/20 to 1/10 oz.
Amber	Triasulfuron	75% DF	0.14 to 0.28 oz.
Express	Thifensulfuron + Tribenuron-methyl	75% DF	1/12 to 1/6 oz.
Harmony Extra	Thifensulfuron + Tribenuron-methyl	75% DF	1/6 to 1/3 oz.
Ally + 2,4-D Amine or Ester <sup>5</sup>	Metsulfuron-methyl	60% DF +	1/20 to 1/10 oz. + 8 fl. ozs.
Amber + 2,4-D	+ 2,4-D Triasulfuron +	4 lbs./gal. 75% DF +	0.14 to 0.28 oz. +
Amine or Ester <sup>5</sup>	2,4-D	4 lbs./gal.	8 fl. ozs.
Express + 2,4-D Amine or Ester <sup>5</sup>	(Thifensulfuron + Tribenuron-methyl) + 2,4-D	75% DF + 4 lbs./gal.	1/12 to 1/6 oz. + 8 fl. ozs.
Harmony Extra + 2,4-Amine or Ester <sup>5</sup>	(Thifensulfuron + Tribenuron-methyl) + 2,4-D	75% DF + 4 lbs./gal.	1/6 to 1/3 oz. + 8 fl. ozs.
Roundup <sup>6</sup>	Glyphosate	3 lbs./gal.	12 to 16 fl. ozs.

<sup>&</sup>lt;sup>1</sup> This product may be used at 6 fl. ozs. on Fall seeded Wheat in Western Oregon as a Spring application only. In CO, KS, NM, OK and TX, up to 8 fl. ozs. of this product may be applied on Fall seeded Wheat after it exceeds the 3 leaf stage for suppression of perennial Weeds, such as Field bindweed. Applications may be made in the Fall following a frost but before a killing freeze. This product may be tank-mixed with 2,4-D Amine at 8 fl. ozs. after Wheat begins to tiller. 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.

- <sup>2</sup> DO NOT use low rates of Sulfonylurea herbicides, such as Ally, Amber, Express, and Harmony Extra on more mature Weeds and/or on dense vegetative growth.
- NOTE: For use on Fall seeded Wheat only. Do not use unless potential crop injury will be acceptable.
- When using formulations other than 4 lbs./gal., use lbs. active per acre listed.
- <sup>5</sup> Use for improved control of Russian thistle, Flixweed, Gromwell, Mayweed and Fiddleneck.
- <sup>6</sup> This product may be applied at 2 fl. ozs. with Roundup as a pre-plant application to small Grains with no waiting period prior to planting. Add 0.5% by volume of an agriculturally approved non-ionic surfactant.

#### **FALL SEEDED BARLEY**

THIS PRODUCT MUST BE APPLIED TO FALL SEEDED BARLEY PRIOR TO THE JOINTING STAGE.

**NOTE:** For Spring Barley varieties that are seeded during the Winter months or later, follow the rates and timings given for Spring seeded Barley.

#### **Tank-Mix Treatments**

This product may be tank-mixed with one or more, but not limited to, the following herbicides. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, Weeds controlled and geographic and other restrictions.

#### **Broadcast Rate Per Treated Acre**

Apply 2 to 4 fluid ounces of this product with:

Product <sup>1</sup>	Active Ingredient	Formulation	Amount of Product per Acre
2,4-D Amine or Ester	2,4-D	4 lbs./gal.	8 fl. ozs. (0.25 lb. a.i./Ac.) <sup>2</sup>
MCPA Amine or Ester	MCPA	4 lbs./gal.	8 to 12 fl. ozs. (0.25 to 0.375 lb. a.i./Ac.)
Ally	Metsulfuron-methyl	60% DF	1/20 to 1/10 oz.
Amber	Triasulfuron	75% DF	0.14 to 0.28 oz.
Express	Thifensulfuron + Tribenuron-methyl	75% DF	1/12 to 1/6 oz.
Harmony Extra	Thifensulfuron + Tribenuron-methyl	75% DF	1/6 to 1/3 oz.
Sencor	Metribuzin <sup>3</sup>	75% DF	1 to 10 ozs.
Buctril	Bromoxynil	2 lbs./gal.	1 to 1.5 pts. 1 to 2 pts.
Bronate	Bromoxynil + MCPA	4 lbs./gal.	0.75 to 1.5 pts.

<sup>&</sup>lt;sup>1</sup> DO NOT use low rates of Sulfonylureas (Ally, Amber, Express and Harmony Extra) on more mature Weeds and/or on dense vegetative growth.

#### SPRING SEEDED BARLEY

THIS PRODUCT MUST BE APPLIED BEFORE SPRING SEEDED BARLEY EXCEEDS THE 4 LEAF STAGE.

#### **Tank-Mix Treatments**

This product may be tank-mixed with one or more of, but not limited to, the following herbicides. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

#### **Broadcast Rate Per Treated Acre**

Apply 2 to 3 fluid ounces of this product with:

Product <sup>1</sup>	Active Ingredient	Formulation	Amount of Product per Acre
MCPA Amine or Ester	MCPA	4 lbs./gal.	8 to 12 fl. ozs. (0.25 to 0.375 lb. a.i./Ac.) <sup>2</sup>
Ally	Metsulfuron-methyl	60% DF	1/20 to 1/10 oz.
Amber	Triasulfuron	75% DF	0.14 to 0.28 oz.
Express	Thifensulfuron + Tribenuron-methyl	75% DF	1/12 to 1/6 oz.
Harmony Extra	Thifensulfuron + Tribenuron-methyl	75% DF	1/6 to 1/3 oz.
Sencor	Metribuzin <sup>3</sup>	75% DF	1 to 10 ozs.
Buctril	Bromoxynil	2 lbs./gal.	1 to 1.5 pts.
Bronate	Bromoxynil + MCPA	4 lbs./gal.	0.75 to 1.5 pts.
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<sup>&</sup>lt;sup>1</sup> DO NOT use low rates of Sulfonylurea (Ally, Amber, Express and Harmony Extra) on more mature Weeds and/or on dense vegetative growth.

#### **FALL AND SPRING SEEDED OATS**

THIS PRODUCT MUST BE APPLIED BEFORE SPRING SEEDED OATS EXCEED THE 5 LEAF STAGE. APPLICATIONS TO FALL SEEDED OATS MUST BE MADE PRIOR TO THE JOINTING STAGE

#### **Tank-Mix Treatments**

This product may be tank-mixed with one or more of, but not limited, the following herbicides. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, weeds controlled and geographic and other restrictions.

#### **Broadcast Rate Per Treated Acre**

Apply 2 to 4 fluid ounces of this product with:

Product	Active Ingredient	Formulation	Amount of Product per Acre
MCPA Amine	MCPA	4 lbs./gal.	8 to 12 fl. ozs.
or Ester			(0.25 to 0.375 lb. a.i./Ac.)
* When using formulations other than 4 lbs./gal., use lbs. active per acre listed.			

<sup>3</sup> Tank-mixtures for Fall seeded Wheat only.

When using formulations other than 4 lbs./gal., use lbs. active per acre listed.

<sup>&</sup>lt;sup>3</sup> Herbicides with the same active ingredient and/or different formulations may be used.

 $<sup>^{\</sup>rm 2}$  When using formulations other than 4 lbs./gal., use lbs. active per acre listed.

Herbicides with the same active ingredient and/or different formulations may be used.

#### **SUGARCANE**

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

Consult your local or State authorities for possible application restrictions, especially concerning aerial application and advice concerning special local use situations.

Pre-harvest Interval (PHI) Restriction: 87 days.

#### **WEEDS CONTROLLED**

This product, when applied at specified rates, will control many annual, biennial and perennial Broadleaf weeds commonly found in Sugarcane. (Refer to the "GENERAL WEED LIST" section.)

#### **RATES AND TIMINGS**

Application of this product may be made any time after Weeds have emerged and are actively growing but before the close-in stage of Sugarcane. Application rates and timings of this product are given below. Use the higher level of the listed rate ranges when treating dense vegetative growth.

Weed Stage and Type	Amount of This Product	Broadcast Rate Per Treated Acre (Lbs. a.e.)
Annual Small, actively growing Established Weed growth	0.5 to 1 pt. 1 to 1.5 pts.	0.25 to 0.5 0.5 to 0.75
Biennial	1 to 2 pts.	0.5 to 1
Perennial	2 pts.	1*
* Application made over the top of actively growing Sugarcane may result in crop injury.		

When possible, 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. Retreatments may be made as needed, however, do not exceed a total of 2 applications of this product per year.

#### **Tank-Mix Treatments**

This product may be tank-mixed with one or more of, but not limited to, the following 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 and geographic and other restrictions.

Herbicide	Rates Per Treated Acre (Lbs. a.i.)	
Ametryn (Evik®)	0.4 to 8	
Asulam (Asulox®)	2 to 3.3	
Atrazine	0.4 to 4	
2,4-D	0.5 to 3*	

<sup>\*</sup> Application of this product plus 2,4-D tank-mix at the higher listed rate range may result in crop injury.

## PASTURE, HAY, RANGELAND AND GENERAL FARMSTEAD (NON-CROPLAND)

This product can be used on Pasture, Hay, Rangeland, General farm-stead (Non-cropland [including fence rows and non-irrigation ditch banks]), for Broadleaf weed and brush control. This product may also be applied to Non-cropland areas for the control of Broadleaf weeds in Noxious Weed Control Programs, Districts or Areas including broadcast or spot treatment of roadsides and highways, utilities, railroad and pipeline Rights-of-Way. Noxious Weeds must be recognized at the State level but programs may be administered at State, County or other levels.

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

Uses of this product described in this section also pertain to small Grains (such as Barley, Forage, Sorghum, Oats, Rye, Sudangrass or Wheat) grown for Pasture use only.

Newly seeded areas, including small Grains grown for Pasture may be severely injured if rates of this product greater than 1 pint per acre are applied.

Established Grass crops growing under stress can exhibit various injury symptoms that may be more pronounced if herbicides are applied. Bentgrass, Carpetgrass, Buffalograss and St. Augustinegrass may be injured at rates exceeding 1 pint of this product (0.5 lb. a.e.) per treated acre. Usually, Colonial bentgrasses are more tolerant than creeping types. Velvetgrasses are most easily injured. Treatments will kill Alfalfa, Clovers, Lespedeza, Wild Winter peas, Vetch and other Legumes. ANIMALS CANNOT BE REMOVED FROM TREATED AREA FOR SLAUGHTER PRIOR TO 30 DAYS AFTER LAST APPLICATION. THERE IS NO WAITING PERIOD BETWEEN TREATMENT AND

GRAZING FOR NON-LACTATING ANIMALS.

## TIMING RESTRICTIONS FOR LACTATING DAIRY ANIMALS FOLLOWING TREATMENT

This Product (Rate/Treated Acre)	Days Before Grazing	Days Before Hay Harvest
Up to 1 pint (0.5 lb. a.e.)	7	37
Up to 1 quart (1 lb. a.e.)	21	51

**NOTE:** Observe all precautions and restrictions on labels of products used in tank-mixes.

#### MIXING AND APPLICATION

This product can be applied using water, oil in water emulsions (including invert systems), or sprayable fluid fertilizer as a carrier. A compatibility test (see "COMPATIBILITY TEST" section) should be made prior to tank-mixing.

To prepare oil-in-water emulsions, half-fill spray tank with water, then add the appropriate amount of emulsifier. With continuous agitation, slowly add the herbicide and then the oil (such as diesel or fuel oil) or a pre-mix of oil plus additional emulsifier to spray tank. Complete filling of spray tank with water. Maintain vigorous agitation during spray operation to prevent oil and water from forming separate layers. This product may be applied broadcast using either ground or aerial application equipment. When using ground equipment, apply 3 to 600 gallons of diluted spray per treated acre. Volume of spray applied will depend on the height, density and type of Weeds or brush being treated and on the type of equipment being used. When using aerial equipment, apply 1 to 40 gallons of diluted spray per treated acre in a water-based carrier.

This product may be applied to individual clumps or small areas (SPOT TREATMENT) of undesirable vegetation using handgun or similar types of application equipment. Apply diluted spray to allow complete wetting (up to runoff) of foliage and stems.

Herbicide adjuvants or other spray additives (emulsifiers, surfactants, wetting agents, drift control agents or penetrants) may be used for wetting, penetration or drift control. Spray additives must be agriculturally approved when used in Pasture applications. If spray additives are used, read and follow all use directions and precautions on product label.

#### **WEEDS CONTROLLED**

This product, when applied at specified rates, will give control of many annual, biennial and perennial Broadleaf weeds, and many Woody brush and Vine species commonly found in Pasture, Hay, Rangeland and General farmstead (Non-cropland) areas. (Refer to the "GENERAL WEED LIST" section.)

Noted (\*) perennial Weeds may be controlled with lower rates of either this product or this product plus 2,4-D. See "RATES AND TIMINGS" below.

#### **RATES AND TIMINGS**

Application rates and timing of this product are given below. Use the higher level of the listed rates ranges when treating dense or tall vegetative growth.

Weed Stage and Type	Amount of This Product	Broadcast Rate Per Treated Acre (Lbs. a.e.)
Annual Small potitively growing	O.E. to 1 pt	0.25 to 0.5
Small, actively growing Established Weed growth	0.5 to 1 pt. 1 to 1.5 pts.	0.25 to 0.5 0.5 to 0.75
Biennial <sup>1</sup> Rosette diameter Less than 3 inches 3 inches or more Bolting	0.5 to 1 pt. 1 to 2 pts. 2 pts.	0.25 to 0.5 0.5 to 1 1
Perennial Suppression or Top growth control Noted (*) Perennials Other Perennials	0.5 to 1 qt. 1 qt. 1 qt.	0.5 to 1 1 1
Woody Brush and Vines Top growth suppression Top growth control <sup>2</sup>	0.5 to 1 qt. 1 qt.	0.5 to 1 1

<sup>&</sup>lt;sup>1</sup> For best performance, make application when biennial Weeds are in the rosette stage.

<sup>2</sup> Species noted in "GENERAL WEED LIST" will require tank-mixtures for adequate control.

Retreatments may be made as needed; however, do not exceed a total of 2 applications of this product per year.

#### **Tank-Mix Treatments**

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

This product may be tank-mixed with one or more of, but not limited to, the following herbicides for control of Grasses, additional Broadleaf weeds and Woody brush and Vines.

Herbicide	Rate Per Treated Acre (Lbs. a.i.)
Pasture, Hay, Rangeland and General	
Farmstead (Non-Cropland) Use:	
Glyphosate (Roundup)	0.75 to 3.75
Métsulfuron-methyl (Álly)	0.0038 to 0.011
Paraguat (Gramoxone)	0.5 to 1
Picloram (Tordon®)	0.125 to 3
Triclopyr (Garlon®)	0.75 to 9
2,4-D	0.25 to 6

Due to the variations that may occur on formulated product and specific use ingredients (e.g., water supplies), a compatibility test (see "COMPATIBILITY TEST" section) is recommended prior to actual tank-mixing.

#### **CUT SURFACE TREE TREATMENTS**

This product may be applied as a cut surface treatment for control of unwanted trees and prevention of sprouts of cut trees. A mix of 1 part of this product with 1 to 3 parts water should be used in application. Use the lower dilution when treating difficult-to-control species.

**Frill or Girdle Treatments:** Make a continuous cut or series of overlapping cuts using an axe to girdle tree trunk. Spray or paint cut surface with this product/water mix.

**Stump Treatments:** Spray or paint freshly cut surface with the water mix. The area adjacent to the bark should be thoroughly wet.

**NOTE:** For more rapid foliar effects, 2,4-D may be added to this product/water mix.

### DORMANT APPLICATIONS FOR CONTROL OF MULTIFLORA ROSE

This product can be applied when plants are dormant as an undiluted spot concentrate directly to the soil or as a LO-OIL basal bark treatment using an oil-water emulsion solution.

Spot concentrate applications of this product should be applied directly to the soil as close as possible to the root crown but within 6 to 8 inches of the crown. On sloping terrain, application should be made to the uphill side of the crown. Do not make application when snow or water prevents applying this product directly to the soil. The use rate of this product is dependent on the canopy diameter of the Multiflora Rose. Examples: Use this product at 0.25, 1 or 2.25 fluid ounces, respectively, for 5, 10 or 15 feet canopy diameters. DO NOT exceed a total of 2 quarts of this product per acre per year.

LO-OIL basal bark applications of this product should be applied to the basal stem region from the ground up to a height of 12 to 18 inches. Spray until runoff, with special emphasis on covering the root crown. For best results, make application when plants are dormant. Do not make application after budbreak or when plants are showing signs of active growth. DO NOT make application when snow or water prevents applying this product to the ground line. Refer to the "MIXING AND APPLICATION" section above for instructions on preparing oil-in-water emulsions. Example for making approximately 2 gallons of a LO-OIL spray solution mixture: Combine 1.5 gallons of water plus 1 ounce of emulsifier plus 1 pint of this product plus 2.5 pints of No. 2 diesel fuel. Adjust amounts of materials used proportionately to the amount of final spray solution desired. DO NOT exceed 8 gallons of spray solution mix applied per acre per year.

This product can be used on both newly-seeded and established Grasses grown in Conservation Reserve or Federal Set-Aside Programs.

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

Treatment of this product will cause injury or may kill Alfalfa, Clovers, Lespedeza, Wild Winter peas, Vetch and other Legumes.

Agriculturally approved surfactants may be added to the spray mixture to improve post-emergence Weed control, particularly in dry growing conditions.

DO NOT use adjuvants containing penetrants such as petroleumbased oils after Grass emergence on newly seeded Grasses.

#### **NEWLY SEEDED AREAS**

This product may be applied either pre-plant or post-emergence to newly seeded Grasses or small Grains such as Barley, Oats, Rye, Sudangrass, Wheat or other Grain species grown as a cover crop. Post-emergence applications may be made after Seedling grasses exceed the 3 leaf stage. Rates of this product greater than 1 pint per treated acre may severely injure newly seeded Grasses. Pre-plant applications – injury to new seedlings may occur if intervals between application and Grass planting is less than 45 days per pint of this product per treated acre West of the Mississippi River or 20 days per pint East of the Mississippi River.

#### **ESTABLISHED GRASS STANDS**

Established Grass stands are perennial Grasses planted one or more seasons prior to treatment. Certain species, such as Bentgrass, Carpetgrass, Smooth brome, Buffalograss or St. Augustinegrass, may be injured when treated with this product at rates exceeding 1 pint per treated acre.

#### **WEEDS CONTROLLED**

This product, when applied at specified rates, will control many annual and biennial Weeds and provide control and suppression of many perennial Weeds (see "GENERAL WEED LIST" section).

#### RATES AND TIMINGS

Application rates and timing of treatment of this product are given below. Use the higher rate of the rate range when vegetation is either dense or tall, or when Weeds are growing under stressed conditions such as drought or cool temperature.

	Broadcast Rate Per Treated Acre		
Weed Type <sup>1</sup> and Stage	Amount of	Equivalent Lbs. of	
	This Product (pts.)	Dicamba a.e.	
Annuals			
Small, actively growing	0.25 to 1	0.125 to 0.5	
Established Weed growth	1	0.5	
Biennials <sup>2</sup>			
Rosette diameter			
a) Less than 3 inches	0.5 to 1	0.25 to 0.5	
b) 3 inches or greater	1 to 2	0.5 to 1	
c) Bolting biennial	2	1	
Perennials <sup>2</sup>			
Suppression/Control	2	1	

- <sup>1</sup> For best results, treat biennial Weeds with this product when they are in the rosette stage of growth. Retreatment may be made as needed; however, DO NOT exceed a total of 2 applications per year.
- <sup>2</sup> Biennial and perennial Weeds will require follow-up (sequential) treatments for seedling control and escapes.

#### **Tank-Mix Treatments**

To control Grasses and additional Broadleaf weeds, this product may be tank-mixed with other herbicides registered for use in Conservation Reserve Programs such as 2,4-D, Glyphosate (Roundup), Paraquat (Gramoxone), Metsulfuron (Ally) and others.

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

#### **ASPARAGUS**

#### **IMPORTANT**

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

If spray contacts emerged spears, crooking (twisting) of some spears may result. If such crooking occurs, discard affected spears.

DO NOT harvest prior to 24 hours after treatment.

DO NOT use in the Coachella Valley of California.

Maximum 2 applications per year. DO NOT exceed a total of 1 pint of this product per treated acre per crop year.

#### **RATES AND TIMINGS**

Apply this product to emerged and actively growing Weeds in 40 to 60 gallons of diluted spray per treated acre immediately after cutting the field, but at least 24 hours before the next cutting.

Weeds	Rate Per Treated Acre
Mustard, Black	0.5 to 1 pt.
Pigweed, Redroot (Carelessweed)	(0.25 to 0.5 lb. a.e.)
Sowthistle, Annual	
Thistle, Canada*	
Thistle, Russian	
Bindweed, Field*	1 pt.
Chickweed, Common	(0.5 lb. a.e.)
Goosefoot, Nettleleaf	
Radish, Wild	
Thistle, Milk	

<sup>\*</sup> This product may be applied in a tank-mixture with either 2,4-D or Roundup for improved control of Canada thistle and Field bindweed.

Read and follow 2,4-D and Roundup herbicide product labeling for precautionary statements, directions for use, application rates and timings and other restrictions.

## TURF AND LAWNS — FOR USE IN GENERAL FARMSTEAD (NON-CROPLAND) AND SOD FARMS IMPORTANT

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

To avoid injury to newly seeded Grasses, application of this product should be delayed until after the second mowing. Furthermore, application rates in excess of 1 pint (0.5 lb. a.e.) per treated acre may cause noticeable stunting or discoloration of sensitive Grass species such as Bentgrass, Carpetgrass, Buffalograss and St. Augustinegrass. In areas where roots of sensitive plants extend, do not apply in excess of 0.25 pint (0.125 lb. a.e.) of this product per treated acre on *coarse textured (Sandy type) soils*, or in excess of 0.5 pint (0.25 lb. a.e.) per treated acre on *fine textured (Clay type) soils*. DO NOT make repeat applications in these areas for 30 days and until previous applications of this product have been activated in the soil by rain or irrigation.

#### **WEEDS CONTROLLED**

This product, when applied at specified rates, will give control of many annual, biennial and noted (\*) perennial Broadleaf weeds commonly found in Turf. This product will also give growth suppression of many other listed perennial Broadleaf weeds and Woody brush and Vine species. (Refer to the "GENERAL WEED LIST" section.)

#### **MIXING AND APPLICATION**

Apply 30 to 200 gallons of diluted spray per treated acre (3 qts. to 4.25 gals. per 1,000 sq. ft.) depending on density or height of Weeds treated and on the type of equipment used.

#### **RATES AND TIMINGS**

Use the higher level of listed rate ranges when treating dense vegetative growth.

	This Product		
Weed Stage and Type	Pints Per Treated Acre	Lbs. A.E. Per Treated Acre	Teaspoons Per 1,000 sq. ft.
Annual			
Small, actively growing	0.5 to 1	0.25 to 0.5	1 to 2.25
Established Weed growth	1 to 1.5	0.5 to 0.75	2.25 to 3.25
Biennial Rosette diameter			
Less than 3 inches	0.5 to 1	0.25 to 0.5	1 to 2.25
3 inches or more	1 to 2	0.5 to 1	2.25 to 4.5
Perennials and Woody brush			
and Vines	1 to 2	0.5 to 1	2.25 to 4.5

For best performance, apply when Weeds have emerged and are actively growing.

Retreatments may be made as needed; however, DO NOT exceed a total of 2 applications of this product per year. Do not exceed a total of 2 pints (1 lb. a.e.) of this product per treated acre during the growing season.

#### **Tank-Mix Treatments**

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

Tank-mix treatments of this product may be made with 2,4-D, MCPA, MCPP or Bromoxynil for control of additional Weeds listed on the tank-mix product.

Apply 0.2 to 0.5 pint (0.1 to 0.25 lb. a.e.) of this product per treated acre with 0.5 to 1.5 lbs. acid equivalent of 2,4-D, MCPA or MCPP or with 0.375 to 0.5 lb. a.i. of Bromoxynil. Use the higher level of the listed rate ranges when treating established Weeds. Repeat treatments may be made as needed; however, DO NOT exceed 2 pints of this product per treated acre during the growing season.

## GRASS SEED CROPS — GRASSES GROWN FOR SEED (Such as Bermudagrass, Bluegrass, Fescue and Ryegrass)

#### **IMPORTANT**

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

Refer to the "PASTURE, HAY, RANGELAND AND GENERAL FARMSTEAD (NON-CROPLAND)" section for possible grazing and feeding restrictions.

DO NOT use on Bentgrass unless possible crop injury can be tolerated.

#### WEEDS CONTROLLED

This product will provide control or suppression of annual Broadleaf weeds listed below. For improved control of listed Weeds plus additional Weeds, this product may be applied in a tank-mix with other herbicides.

#### RATES AND TIMINGS

Apply 0.5 to 1 pint of this product per treated acre on seedling Grass after the crop reaches the 3 to 5 leaf stage. Apply up to 2 pints of this product on well-established perennial Grass. DO NOT apply after the Grass seed crop begins to joint. For best performance, make applications when Weeds are in the 2 to 4 leaf stage and rosettes are less than 2 inches across. Use the higher level of listed rate ranges when treating more mature Weeds or dense vegetative growth.

#### **Tank-Mix Treatments**

For control of Grasses or additional Broadleaf weeds, this product may be tank-mixed with all Broadleaf herbicides registered for use in Grass seed production. Read and follow the label of each tank-mix product used for precautionary statements, directions for use, Weeds controlled and geographic and other restrictions.

#### **Broadcast Rate Per Treated Acre**

Apply 0.5 to 2 pints of this product with:

Product	Active Ingredient	Formulation	Amount of Product per Acre	
2,4-D Amine or Ester	2,4-D	4 lbs./gal.	1 to 4 pts. (0.5 to 2 lbs. a.i./Ac.) <sup>1</sup>	
MCPA Amine	MCPA	4 lbs./gal.	1 to 2 pts. (0.5 to 1 lb. a.i./Ac.) <sup>1</sup>	
Buctril	Bromoxynil <sup>2</sup>	2 lbs./gal.	1 to 2 pts.	
Curtail	Clopyralid + 2,4-D	2.38 lbs./gal.	1.75 to 4 pts.	
Karmex	Diuron <sup>2</sup>	80% DF	2 to 4 lbs.	
Stinger	Clopyralid	3 lbs./gal.	0.25 to 1 pt.	
1 Whon using formulation other than 4 lbs /gal. use lbs, active ingredient per acre listed				

When using formulation other than 4 lbs./gal., use lbs. active ingredient per acre listed.
 Herbicides with the same common name and/or different formulations may be used.

#### ANNUAL GRASS CONTROL

For suppression of annual Weeds such as:

E	Brome, Downy (Cheatgrass)	Brome, Ripgut	Fescue, Rattail	Windgrass
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Apply 2 pints of this product per treated acre in the Fall or late Summer after harvest and burning of established Grass seed crops. Application should be made immediately following the first irrigation when the soil is moist and before Weeds have more than 2 leaves.

#### **PRE-PLANT DIRECTIONS**

#### (POST-HARVEST/FALLOW/CROP STUBBLE/SET-A-SIDE) FOR BROADLEAF WEED CONTROL BEFORE WHEAT, CORN, SORGHUM AND SOYBEANS

#### **IMPORTANT**

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

#### **WEEDS CONTROLLED**

This product may be applied alone or in Atrazine combinations with other herbicides registered for this use.

This product can be applied either post-harvest in the Fall, Spring or Summer during the fallow period or to crop stubble/set-a-side acres. This product, when applied at the specified rates, will control many annual Broadleaf weeds (see the "WEEDS CONTROLLED" section under small Grains). In addition, this product will control or suppress the following biennial and perennial Broadleaf weeds:

Alfalfa <sup>1</sup>	Dock, Curly <sup>1</sup>	Sowthistle, Perennial <sup>1</sup>
Artichoke, Jerusalem	Dogbane, Hemp	Spurge, Leafy
Bindweed, Field	Garlic, Wild <sup>2</sup>	Thistle, Bull
Bindweed, Hedge	Horsenettle, Carolina	Thistle, Canada <sup>2</sup>
Blueweed, Texas	Knapweed, Diffuse	Thistle, Milk
Bursage	Knapweed, Spotted	Thistle, Musk
(Bur Ragweed	Nightshade, Silver	Thistle, Plumeless
Povertyweed, Lakeweed)1	Redvine	Thistle, Scotch
Dandelion, Common <sup>1</sup>	Smartweed, Swamp	Trumpetcreeper (Buckvine)
Danucion, Common	Smartweeu, Swariip	Trumpetcreeper (Buckville)

<sup>&</sup>lt;sup>1</sup> These Perennials may be controlled using this product at rates lower than those specified for other listed perennial Weeds. See "RATES AND TIMINGS" in this section.

<sup>&</sup>lt;sup>2</sup> See the "SPECIAL TANK-MIX TREATMENTS" section of this heading for specific control program for these Weeds.

#### **RATES AND TIMINGS**

Apply this product as a broadcast or spot treatment to emerged and actively growing Weeds after crop harvest (post-harvest) and before a killing frost, in the fallow cropland, or cropland or crop stubble the following Spring or Summer. Agriculturally approved spray additives, such as surfactants or oils, may be used to enhance spray coverage and the herbicide's penetration of Weed foliage. See "CROPPING RESTRICTIONS" section for specified interval between application and planting to prevent crop injury.

For best performance, make application when annual Weeds are less than 6 inches 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. Most effective control of upright perennial Broadleaf weeds, such as Canada thistle and Jerusalem artichoke, occurs if application is made when the majority of Weeds, such as Field bindweed and Hedge bindweed, are in or beyond the full bloom stage. Avoid disturbing treated areas following application. Treatments may not kill Weeds which 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. For small Grain in-crop uses of this product, see the *"RATES AND TIMINGS"* section under the small Grains heading for details.

Weed Type	Amount of This Product Per Treated Acre (Pts.)		
Annuals	0.5 to 1		
Biennials	1 to 2		
Perennials Suppression	1 to 2		

Retreatment may be made as needed; however, DO NOT exceed a total of 2 applications of this product per year.

#### **Tank-Mix Treatments**

This product may be tank-mixed with one or more of, but not limited to, the following 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 and geographic or other restrictions.

### Broadcast Rate Of This Product Per Treated Acre For Annual Weed Control

Apply 0.25 to 1 pint of this product with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre
Aatrex® 4L1	Atrazine	4 lbs./gal.	0.5 to 6 pts.
Aatrex Nine-O <sup>1</sup>	Atrazine	90% DF	0.5 to 3.3 lbs.
Amber <sup>2</sup>	Trisulfuron	75% DF	0.28 to 0.35 oz.
Ally <sup>2</sup>	Metsulfuron-methyl	75% DF	0.1 oz.
Fallow Master®	Glyphosate + Dicamba	2 lbs./gal.	22 to 44 fl. ozs.
Gramoxone Extra	Paraquat	2.5 lbs./gal.	1.5 pts.
Kerb <sup>®1</sup>	Pronamide	50-W	0.5 to 1 lb.
Landmaster® BW	Glyphosate + 2,4-D	2.4 lbs./gal.	27 to 54 fl. ozs.
Roundup	Glyphosate	3 lbs./gal.	8 to 48 fl. ozs.
Sencor DF <sup>1</sup>	Metribuzin	75% DF	0.5 to 1 lb.
Sencor 4 <sup>1</sup>	Metribuzin	4 lbs./gal.	0.75 to 1.5 pts.
2,4-D	2,4-D	4 lbs./gal.	1 to 2 pts. (0.5 to 1 lb. a.i./Ac.)3

<sup>&</sup>lt;sup>1</sup> Tank-mixes of this product with these products may be subject to special restrictions. See the product label of the tank-mix partner for intended use rates, restrictions and other precautions.

## Broadcast Rate Of This Product Per Treated Acre For Biennial And Perennial Weed Control

Apply 1 to 2 pints of this product with:

Product	Active Ingredient	Formulation	Amount of Product Per Acre	
Curtail	Clopyralid + 2,4-D	2.38 lbs./gal.	2 to 4 pts.	
2,4-D	2,4-D	4 lbs./gal.	2 to 6 pts. (1 to 3 lbs. a.i./Ac.)*	
Landmaster BW	Glyphosate + 2,4-D	2.4 lbs./gal.	54 fl. ozs.	
Roundup	Glyphosate	3 lbs./gal.	1 to 5 qts.	
Tordon® 22K	Picloram	2 lbs./gal.	0.5 to 1 pt.	
* When using formulations other than 4 lbs./gal., use lbs. active per acre listed.				

#### SPECIAL TANK-MIX TREATMENTS

For suppression of perennial Weeds, apply 0.5 to 1 pint of this product with 8 to 16 fluid ounces of Roundup or Roundup RT Herbicide per treated acre

For Wild garlic control, apply 1 pint of this product with 3 pints of 2,4-D LV Ester (4 lbs./gal.) per treated acre. Apply when wild Garlic is 4 to 8 inches tall.

For Canada thistle control, use this product alone, this product plus Curtail or this product plus Roundup herbicide tank-mix treatments. Application may be made during fallow periods for control of Volunteer barley, Bulbous bluegrass, Downy brome, Jointed goatgrass, Common rye and Volunteer wheat when they are actively growing. Use 1 pint of this product with 0.5 to 1 pound Kerb 50W. Fall seeded Wheat may be planted 9 months or more after application. For best performance, make application between mid-October and mid-December prior to soil freeze up.

During fallow periods, apply this product plus Landmaster BW or Fallow Master Herbicide to give improved control of Kochia, Wild buckwheat, Prickly lettuce, Field bindweed and Canada thistle. Use 0.125 to 0.25 pint of this product plus 22 to 54 fluid ounces of Landmaster BW or Fallow Master Herbicide for annual Weed control or 0.25 to 0.5 pint of this product plus 22 to 54 fluid ounces of Landmaster BW or Fallow Master Herbicide for perennial Weed suppression.

#### **CROPPING RESTRICTIONS**

The following directions are based on use rates of this product up to 2 pints per treated acre.

Corn, Sorghum and Soybeans may be planted in the Spring following applications made during the previous year. If less than 1 inch of rainfall occurs between application and first killing frost, treated areas should be cultivated to allow herbicide to come in contact with moist soil. Cultivation may take place before or immediately after ground thaw.

Soybean injury may occur if the interval between application and planting is less than specified. In areas with greater than 30 inches of rainfall, delay planting for 30 days per pint of this product per treated acre. In areas with less than 30 inches of rainfall, delay planting for 45 days per pint of this product per treated acre. Exclude days when ground is frozen.

Wheat may be planted in the Fall or Spring following applications. Also, spot application may be made any time prior to crop emergence if crop injury can be tolerated in treated areas. Wheat injury may occur if the interval between application and planting is less than specified. **East of the Mississippi River:** The interval is 20 days per pint of this product per treated acre, or 1.25 days per 1 fluid ounce. Moisture is essential for degradation of this product. Exclude days when ground is frozen.

West of the Mississippi River: The interval is 45 days per pint of this product per treated acre or 3 days per 1 fluid ounce. Moisture is essential for degradation of this product. Exclude days when ground is frozen.

Following a normal harvest of Barley, Oats or Wheat, any rotational crop may be planted. If the interval before harvest is shortened, such as when cover crops will be plowed under, do not follow up with the planting of a sensitive crop.

## CONTROL OF PERENNIAL BROADLEAF WEEDS IN CROPLAND (SPOT APPLICATION\* ONLY)

\*Spot application is defined as an area no greater than 1,000 square feet per acre.

## FOR USE ONLY IN THE STATES OF IDAHO, MONTANA, NEVADA, OREGON, UTAH AND WASHINGTON IMPORTANT

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

Do not treat sub-irrigated cropland or areas where the soil remains saturated with water throughout the year.

Make only one application of this product per year.

<sup>&</sup>lt;sup>2</sup> When tank-mixing with Sulfonylurea herbicides, refer to the product label for rates and restrictions. Use a surfactant of at least 80% active ingredient at the rate of 1 to 2 qts./100 gals. of spray or not more than 0.25 to 0.5% by volume. Use the highest rate of surfactant when using the lower rate ranges of the tank-mix and/or when treating more mature Weeds or dense vegetative growth. Sulfonylurea-resistant Weeds may not be controlled by tank-mixes of this product and a Sulfonylurea. Refer to this product's tank-mix section for alternative tank-mixes.

When using formulations other than 4 lbs./gal., use lbs. active ingredient per acre listed.

#### **WEEDS CONTROLLED**

This product, when applied at specified rates, will control many Broadleaf weeds including:

Bindweed, Field	Dock, Curly	Ragwort, Tansy
Dock, Broadleaf	Knapweed, Black	Spurge, Leafy
(Bitterdock)	Knapweed, Russian	Thistle, Canada

#### **RATES AND TIMINGS**

This product may be applied at any time following a crop harvest to stubble fallow or other cropland. Application should be made when Weeds are actively growing and prior to a killing frost.

Apply 2 pints (1 lb. a.e.) of this product per treated acre. Application may be made up to one month prior to the planting of Wheat.

**NOTE:** DO NOT use unless injury to Wheat or rotated Barley will be acceptable.

Barley, Oats, Corn, Sorghum (Milo), annual or perennial Grass crops may be planted into treated areas one year after application. Crops grown for seed (other than perennial Grass seed) should not be planted into treated areas until three years after application. DO NOT plant Broadleaf crops such as Alfalfa, Beans, Peas, Potatoes or Sugar beets into treated areas until two years after application.

In most cases, treatments will not kill Perennial seedlings which germinate from seed one or two years after treatment. Once the effect of the chemical has been lost, a follow-up program for seedling control or other cultural practices should be instituted.

#### WIPER APPLICATION USES

#### **IMPORTANT**

Observe all precautions and read and follow mixing, application and cleaning instructions on this label.

This product may be applied through wiper application equipment to control or suppress actively growing Broadleaf weeds, brush and vines. Use a solution containing 1 part of this product to 1 part water. DO NOT contact desirable vegetation with herbicide solution. Wiper application should only be made to crops (including pastures) and non-cropland areas described in this label with the exception of Grain sorghum (Milo).

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. **PESTICIDE STORAGE:** Store in original container in well-ventilated area separately from fertilizer, feed and foodstuff. Avoid cross-contamination with other pesticides. Spillage or leakage should be contained and absorbed with clay granules, sawdust or equivalent material for disposal.

**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **CONTAINER DISPOSAL:** 

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container 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 one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; greater than 5 gallons up to < 250 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth 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. Dispose of empty container in a sanitary landfill or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. (Continued)

#### STORAGE AND DISPOSAL (Cont.)

Refillable Container (≥ 250 gallons & Bulk): Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

#### WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. The foregoing is a condition of sale by the Seller and is accepted as such by the Buyer.