

# Drexel

## Razencane™ 6.7E

### Selective Herbicide

Preplant incorporated herbicide for weed control (including Foxtails, Seedling johnsongrass, Nutsedge, Bermudagrass, and suppression of Woolly cupgrass and Wild proso millet) in Field, Sweet, Pop, and Silage corn.

#### ACTIVE INGREDIENT:

EPTC: S-ethyl dipropylthiocarbamate . . . . . 82.6%

OTHER INGREDIENTS: . . . . . 17.4%

TOTAL: . . . . . 100.0%

Contains 6.7 lbs. of active ingredient per gallon.

### KEEP OUT OF REACH OF CHILDREN WARNING / AVISO

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 **FIRST AID** Below

**SHAKE WELL BEFORE USING**

EPA Reg. No. 19713-562

EPA Est. No. \_\_\_\_\_

Net Contents: \_\_\_\_\_

#### 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.

##### IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.

##### IF SWALLOWED:

- 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.

##### 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 treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

##### NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage. This product contains EPTC, a thiocarbamate that inhibits cholinesterase. If symptoms of cholinesterase inhibition are present, atropine by injection is antidotal. Pralidoxime chloride (2-PAM) is NOT recommended as an antidote for this compound. Thiocarbamates have been shown in laboratory animals to cause a disulfiram (Antabuse) -type reaction in combination with alcohol.

#### PRECAUTIONARY STATEMENTS

##### Hazards to Humans and Domestic Animals

**WARNING:** Causes substantial but temporary eye injury. Harmful if swallowed or absorbed through the skin or inhaled. Do not get in eyes or on clothing.

(Continued)

#### PRECAUTIONARY STATEMENTS (Con't.)

##### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical-resistance category selection chart.

**Mixers, Loaders, and Handlers exposed to the concentrate must wear:**

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate or nitrile gloves or neoprene rubber or viton
- Chemical-resistant footwear and socks
- Protective eyewear
- Chemical-resistant apron

In addition to the above PPE, persons mixing and loading into chemigation systems, must wear a NIOSH approved respirator with:

- A NIOSH approved half-mask respirator equipped with a combination of organic vapor cartridges and HE or P-100 particulate filters with approval prefix number TC-23C-
- A NIOSH approved gas mask equipped with a combination of chin style organic vapor canister and HE or P-100 filters with approval prefix number TC-14G-

**All workers who handle this product including those exposed to the dilute must wear:**

- Long-sleeved shirt and long pants
- Shoes plus socks

In addition to the above PPE, applicators using backpack or hand-held equipment must wear:

- Chemical-resistant gloves such as barrier laminate or nitrile gloves or neoprene rubber or Viton
- Loaders supporting aerial application must wear the above NIOSH approved respirator.

Additional PPE is required for the following operations:

- Applying with a hand gun (hydraulic sprayer) must wear chemical-resistant gloves, chemical-resistant apron, chemical-resistant footwear and socks.
- Loaders supporting aerial application must wear the above NIOSH approved respirator.

In addition to the above PPE, applicators applying dry bulk fertilizers with a specialized truck designed to treat more than 80 acres, must wear:

- A NIOSH approved half-mask respirator equipped with a combination of organic vapor cartridges and HE or P-100 particulate filters with approval prefix number TC-23C-
- A NIOSH approved gas mask equipped with a combination of chin style organic vapor canister and HE or P-100 filters with approval prefix number TC-14G-

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.

Manufactured By:

**Drexel Chemical Company**

P.O. BOX 13327, MEMPHIS, TN 38113-0327

**SINCE 1972**

## ENGINEERING CONTROLS

Commercial (for-hire) Handlers engaged in impregnating this product onto dry bulk fertilizer must:

- Use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4), and
- Wear the personal protective equipment required for mixers/loaders, except shoes may be substituted for chemical-resistant footwear, and
- Have immediately available for use in case of an accident a NIOSH approved respirator with:
  - A NIOSH approved half-mask respirator equipped with a combination of organic vapor cartridges and HE or P-100 particulate filters with approval prefix number TC-23C-
  - A NIOSH approved gas mask equipped with a combination of chin style organic vapor canister and HE or P-100 filters with approval prefix number TC-14G-

When other handlers use closed systems or enclosed cabs, in a manner that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

## 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 HAZARD

This chemical is toxic to mammals. Do not apply directly to water, or to areas where water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash water or rinsate.

## Physical and Chemical Hazards

Combustible liquid. Keep away from heat and flame.

## GENERAL INFORMATION

Razencane 6.7E is a selective soil applied herbicide which must be mixed or incorporated into the soil for control of weeds listed on this label. This product controls weeds by interfering with normal germination and seedling development. This product will not control established or germinated weeds present at application.

## GENERAL USE PRECAUTIONS

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, OR ILLEGAL RESIDUES.

This product can be stored at temperatures as low as minus 50°F.

This product should be used for recommended purposes and at recommended rates. Do not overdose.

This product is recommended for use only on mineral soils (those soils containing less than 10% organic matter).

Do not use this product on corn seed stock such as Breeders, Foundation, or Increase.

This product may be used on production seed corn.

Do not use this product on sorghum or milo.

Do not allow this product to contaminate water to be used on susceptible crops and ornamentals, or for domestic purposes.

Do not allow this product to contaminate feed or food.

This product should not be stored near seeds or fertilizers.

All containers of this product should be kept tightly closed when not in use.

This product will not harm the treated crop nor leave harmful soil residues past harvest when applied properly and environmental conditions exist for normal plant growth during the season.

Adverse conditions such as unusually cold and wet or hot and dry weather during germination and early growth; insect, nematode, or plant disease attack; carryover soils residues of persistent herbicides or use of certain soil applied systemic insecticides can create abnormal conditions that weaken crop seedlings. This product used under these conditions could result in crop injury.

Continuous use of this product in the same fields consecutively year after year can in some areas lead to a decrease in the level of performance. As a precaution, fields treated with this product should be rotated with another crop or herbicide classification on an annual program.

## DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

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

## AGRICULTURAL USE REQUIREMENTS

Use this product only on 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, 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 (REI). 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 REI of 12 hours.**

**Exception:** If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

## CALIFORNIA MITIGATION MEASURES FOR HANDLERS AND APPLICATORS

In addition to the personal protective equipment (PPE) described within the AGRICULTURAL USE REQUIREMENTS box above, the mitigation measures outlined below must be complied with in California:

**Handlers (Mixers/Loaders, Applicators, except applicators for water-run chemigation)**

- Coveralls and a half-mask respirator approved by the National Institute for Occupational Safety and Health (NIOSH) must be worn in addition to the PPE described in the box above.
- For center pivot irrigation systems, mixer/loader, applicators must wear full body chemical-resistant protective clothing and half-face respirators in addition to the PPE described in the box above.
- A closed mixing/loading system, an enclosed cab or other engineering controls can be used to replace the above mentioned PPE according to criteria given in the current federal Worker Protection Standard.

Limit mixing/loading of this product to 500 gallons per mixer/loader per 21-day period, not to exceed 75 gallons per mixer/loader per day.

Limit application of this product through center pivot irrigation to 40 gallons per applicator per 21-day period, not to exceed 20 gallons per applicator per day

Limit other applications of this product to 210 gallons per applicator per 21-day period, not to exceed 30 gallons per applicator per day.

Limit application of this product to 280 gallons per applicator per 21-day period, not to exceed 40 gallons per applicator per day when ground applicators use enclosed cabs as specified in the American Society of Agricultural Engineer Standard S525, November 1997.

The operator of the property shall include in their Pesticide Use Records the name of the person(s) that handled the product for each application.

All applicable directions, restrictions, and precautions on the EPA-registered label are to be followed.

This labeling must be in the possession of the user at the time of herbicide application.

## APPLICATION DIRECTIONS

Do not apply this product in a manner that allows spray or dust to drift from the application target site and/or cause harm to humans, animals, or other non-target sites.

## Carriers

**Liquids** - Either water or fluid fertilizers such as solutions, slurries or suspensions may be used as liquid carriers. If fluid fertilizers are used, a physical compatibility with these must be done before combining in the spray tank. See Appendix I for details of the compatibility testing procedure. Even if this product is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

**Dry Bulk Fertilizer** - This product may be impregnated on dry bulk fertilizer and applied as the fertilizer is spread. Bulk fertilizer impregnated with this product should be applied immediately, not stored.

It is recommended that all bulk containers be tightly covered while the product is being transported and applied to reduce probability of this product loss via volatilization.

When application and incorporation are done in separate operations, impregnated fertilizer must be incorporated on the same day as applied.

When separate operations delay incorporation, applications must be made on a soil surface dry to one-half inch deep and free from dew and incidental moisture.

See APPENDIX II and consult your local dealer for details including what fertilizers are compatible.

## ADDING TO SPRAY TANK

### If this product is used alone:

Add the recommended amount to a clean (thoroughly rinsed and decontaminated) spray tank before it is half filled so that addition of the remaining water or fluid fertilizer carrier can aid in the thorough agitation and mixing of the spray solution.

### If a tank mixture is used:

See specific direction on this label for order of mixing and agitation.

## VOLUME

Apply in 10 to 50 gallons of water or fluid fertilizers per acre using a properly calibrated sprayer having good agitation.

## PRESSURE

Use 20 to 40 psi to ensure good distribution in the spray pattern.

## SOIL MOISTURE AND TILTH

Improper incorporation or poor tilth such as large clods may result in erratic or unsatisfactory weed control.

The soil should be dry enough to permit good soil mixing or incorporation. Any application of this product that is not immediately incorporated in the same operation must be made to a soil surface dry to at least one-half inch deep and free from dew and incidental moisture.

## INCORPORATION TIMING

Application and incorporation should be done in the same operation when possible.

Applications in water or fluid fertilizers must not have more than a 4-hour delay between application and incorporation. When application and incorporation are separate operations in the semi-arid areas of Eastern Washington, Eastern Oregon and Idaho, this product must be incorporated the same day as applied. See moisture statement. This product impregnated on dry bulk fertilizer must be incorporated on the same day as application. See moisture statement.

## INCORPORATION EQUIPMENT AND METHODS

This product must be incorporated into the soil to prevent loss of the herbicide. Thorough mixing is necessary.

### Power driven cultivation equipment:

Soil should have previous primary tillage.

Ground speed must be adjusted with PTO driven cultivation tools to insure thorough incorporation.

Set horizontal action tine equipment to cut 4 to 6 inches deep.

Set vertical action tine equipment to cut 3 to 4 inches deep.

### Tandem disc:

Can be used on all soil types.

Set disc to cut 4 to 6 inches deep

Operate disc at 4 to 6 mph.

Follow disc by a harrow or leveling device slightly wider than that of the disc.

Two passes in different directions will improve incorporation.

On the second pass, the disc should be operated no deeper than on the first pass.

If deep germinating weeds are present, a second incorporation will improve control or suppression. Weeds which fall into this category are: Seedling Johnsongrass, Quackgrass, and Nutsedge.

### Field cultivator:

Use on light soils in good tilth.

Equip with 3 to 4 rows of sweeps spaced at 7 inches or less and staggered from row to row to leave no soil unturned or undisturbed.

Set the field cultivator to cut 4 to 6 inches deep.

Operate at 5 mph or more.

Follow by a harrow or leveling device.

Chisel plows or point should not be used.

Two passes in different directions will improve incorporation.

If deep germinating weeds are present, use a tandem disc for the first pass. Weeds which fall into this category are: Seedling Johnsongrass, Quackgrass, and Nutsedge.

### Subsurface Injection (for Annual grasses, Broadleaves, and Nutsedge):

Southeastern U.S. on coarse textured soils only.

Light infestations only.

Adjust dosage proportionately depending on row spacing and width to be treated.

### Center Pivot Sprinkler (for Annual grasses and Broadleaves only):

This product can be applied and incorporated before or immediately after planting before corn or weeds have emerged at the rates recommended for the specific weed.

Application and incorporation should be done after last tillage operation and before weeds germinate.

Meter the herbicide during entire irrigation period.

Apply in one-half to three-fourths inches of water. Excess water can result in the movement of this product from weed germination area and result in poor control.

Apply only through center pivot sprinkler irrigation systems. Do not apply through any other type of system.

In the semi-arid areas of Eastern Washington, Eastern Oregon, and Idaho, this product may be surface applied immediately after planting.

See soil moisture statement.

This product can then be incorporated using one-half to three-fourths inch of water within 36 hours following application.

The application and incorporation must be done within 5 days after the last tillage operation since poor results will occur if weeds have germinated.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

Questions about calibration should be directed to your State Extension Service specialist, equipment manufacturers, or other experts.

Do not connect an irrigation system, including greenhouse systems, used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

## USE PRECAUTIONS:

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

The system must use a metering pump, such as a positive displacement injection pump effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Application of more than label recommended quantities or irrigation water per acre may result in decreased product performance by removing the chemical from the zone of effectiveness.

Apply during low or no wind conditions to avoid drift.

Insure system connection or fittings do not leak and nozzles provide uniform distribution.

Lines containing the product must not be dismantled and drained.

Greater accuracy in calibration and distribution is achieved by injecting a larger volume of a more dilute slurry per hour.

For example:

**Table 1**

This product at the rate of 4.75 pts./acre is to be applied to 110 acres.  $110 \text{ acres} \times 4.75 \text{ pints} = 522.5 \text{ pints}$ .

$522.5 \text{ pints} \text{ divided by } 8 \text{ pints/gallon} = 65.3 \text{ gallons}$  of this product that must be added to mixing tank.

If mixing tank size is 750 gallons and if the sprinkler takes 30 hours to apply one-half inch of water, the injection rate is  $750 \text{ gallons} \text{ divided by } 30 \text{ gallons/hour} = 25 \text{ gallons/hour}$  or  $0.4 \text{ gallons/minute}$ .

For this example only, the operator should calibrate the injection pump to deliver the herbicide mix into the system at 25 gals./hr. or 0.4 gals./min.

## Planting

Planting should occur as soon as possible after application and always within 2 weeks after treatment.

Plant seed to a maximum depth of 2 inches.

Avoid moving or shaping soil after incorporation since this can remove this product from the row and result in a loss of weed control.

## Cultivation

Should weeds develop, a shallow cultivation or rotary hoeing will generally result in better weed control.

A shallow cultivation is less than one-half the depth of incorporation.

## WEEDS CONTROLLED AND USE RATES

Consult Tables 2 and 3 below.

Note "Comments and Restriction" in Tables 2 and 3.

### Table 2: Broadcast Rate (Pints) of This Product Per Acre

The annual broadleaf weeds listed below will be controlled only if treatment is made when conditions are favorable for weed seed germination and growth. Under prolonged conditions of very cold soil, control of the listed broadleaf weeds may not be adequate.

Annual Grass and Broadleaf Weeds	Scientific Name	Eastern and Central U.S.	Western U.S. (except AZ and CA)	Arizona and California
Barnyardgrass (Watergrass)	<i>Echinochloa</i> spp.	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Bluegrass, annual	<i>Poa annua</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Carpet weed	<i>Mollugo verticillata</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Chickweed, common	<i>Stellaria media</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Crabgrass	<i>Digitaria</i> spp.	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Fiddleneck	<i>Amsinckia</i> spp.	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Foxtail, giant	<i>Setaria faberi</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Foxtail, green	<i>Setaria viridis</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Foxtail, yellow	<i>Setaria lutescens</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Goosefoot, nettleleaf	<i>Chenopodium murale</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Goosegrass	<i>Eleusine indica</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Henbit (deadnettle)	<i>Lamium amplexicaule</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Lambsquarters, common	<i>Chenopodium album</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Morningglory, tall	<i>Ipomoea purpurea</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Nightshade, black	<i>Solanum nigrum</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Nightshade, hairy	<i>Solanum sarachoides</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Panicum, fall	<i>Panicum dichotomiflorum</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Panicum, Texas <sup>1,2</sup>	<i>Panicum texanum</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Pigweed, redroot (common)	<i>Amaranthus retroflexus</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Pigweed, prostrate	<i>Amaranthus blitoides</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Pigweed, tumble	<i>Amaranthus albus</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Puncturevine <sup>3</sup>	<i>Tribulus terrestris</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Purslane, common	<i>Portulaca oleracea</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Pusley, Florida	<i>Richardia scabra</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Rescuegrass	<i>Bromus willdenowii</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Rice, red	<i>Oryza sativa</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Ryegrass, annual (Italian)	<i>Lolium multiflorum</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Shepherdspurse	<i>Capsella bursa-pastoris</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Sicklepod	<i>Cassia obtusifolia</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Sida, prickly (teaweed)	<i>Sida spinosa</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Signalgrass	<i>Brachiaria</i> spp.	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Spurry, corn	<i>Spergula arvensis</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Stinkgrass	<i>Eragrostis cilianensis</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Volunteer barley	<i>Hordeum vulgare</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Volunteer oats	<i>Avena sativa</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
Volunteer wheat	<i>Triticum aestivum</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75

(Continued)

(Cont.)
<p><b>Comments and Restrictions:</b>  GENERAL - Use the lower rate for light infestations and in sand and light (coarse textured) soils.  Use this product on Sweet corn at the 7.33 pint rate only in the states of Oregon, Washington, Idaho, Utah (Western Region), Minnesota, and Wisconsin (Central Region)</p> <p>REGIONAL - USE ONLY THE RECOMMENDATIONS FOR YOUR REGION</p> <p>EASTERN and CENTRAL U.S. - (Alabama, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin, and Wyoming.</p> <p>When this product is used in the southeastern U.S. on Silage corn, do not seed small grains until September.</p> <p>When furrow irrigation is used on flat-planted Corn on the Western slope of Colorado, do not form furrows until Corn is in the three-leaf stage.</p> <p>WESTERN U.S. - (Alaska, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington), ARIZONA, and CALIFORNIA.</p> <p>Soils lacking enough moisture for seed germination must be pre-irrigated prior to the application of this product.</p> <p><sup>1</sup>Cultivation is suggested in addition to treatment of this product in fields with moderate to heavy infestations of Texas panicum.  <sup>2</sup>Southeastern U.S. only.  <sup>3</sup>Western U.S. only.</p>

**Table 3: Broadcast Rate of This Product (Pints) Per Acre**

Perennial weeds must be turned under and chopped up thoroughly prior to treatment. The rhizomes of quackgrass and the rhizomes and stolons of bermudagrass must be cut up thoroughly into small pieces so that 4 or less nodes remain on a strand.

Tough Annual Weeds and Perennial Weeds	Scientific Name	Eastern and Central U.S. <sup>1</sup>	Western U.S. (except AZ and CA) <sup>1</sup>	Arizona and California <sup>1,4</sup>
Bermudagrass	<i>Cynodon dactylon</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 4.75
<b>Comments and Restriction:</b> Using a program of plowing and disking followed by this product will give good control of seedlings and stolons.				
Cupgrass, wolly <sup>2,3</sup>	<i>Eriochloa villosa</i>	4.75 to 7.33	4.75 to 7.33	4.75 to 7.33
<b>Comments and Restrictions:</b> Suppression only. Control can be improved with a tank mix or sequential preemergence or postemergence herbicide treatment.				
Johnsongrass (seedling) <sup>2</sup>	<i>Sorghum halepense</i>	4.75 to 7.33	4.75 to 7.33	3.75 to 4.75
<b>Comments and Restrictions:</b> Cultivate fields with moderate to heavy infestations one to two times following application of this product.				
Millet, wild proso <sup>2,3</sup>	<i>Panicum millaceum</i>	4.75 to 7.33	4.75 to 7.33	4.75 to 7.33
<b>Comments and Restrictions:</b> Suppression only. Control can be improved with a tank mix or sequential preemergence or postemergence herbicide treatment.				
Oats, wild Sandbur, field <sup>2</sup>	<i>Avena fatua</i> , <i>Cenchrus pauciflorus</i>	4.75 to 7.33 4.75 to 7.33	3.75 to 7.33 4.75 to 7.33	3.75 to 4.75 4.75 to 7.33
Nutsedge, purple	<i>Cyperus rotundus</i> ,	4.75 to 7.33	3.75 to 7.33	3.75 to 7.33
Nutsedge, yellow	<i>Cyperus esculentus</i>	4.75 to 7.33	3.75 to 7.33	3.75 to 7.33
<b>Comments and Restrictions:</b> Two-pass incorporation in different directions is required.				
Quackgrass	<i>Agropyron repens</i>	7.33	7.33	7.33
<b>Comments and Restrictions:</b> For suppression only. For improved suppression, this product can be preceded by a preplow application of Atrazine. Broadcast Atrazine 80W at 2.5 lbs. or 4L at 2 qts./acre in the Spring. Plow 1 to 3 weeks later. Follow with this product in the Spring.				

<sup>1</sup>Consult Table 2 for general comments, states, and other restrictions for each region listed.

<sup>2</sup>Cultivation is suggested in addition to treatment using this product in fields with moderate to heavy infestations of Seedling Johnsongrass, field Sandbur, Woolly cupgrass, and Wild proso millet.

<sup>3</sup>Central U.S. only - partial control or suppression.

<sup>4</sup>Do not apply greater than 4.75 pints of this product per acre in Arizona or the 10 southernmost counties of California.

For band applications, calculate the amount to be applied per acre as follows:

Band width in inches	x	Rate per acre for a broadcast treatment	=	Amount needed for a band treatment
Row width in inches				

### TANK MIX COMBINATIONS

#### Atrazine and Simazine Herbicide Combinations

For control of additional weeds and increased control of labeled broadleaf weeds, Atrazine or Simazine may be tank mixed and applied pre-plant incorporated with recommended use rates of this product.

Do not apply Atrazine or Simazine through any irrigation system.

Atrazine combination may be impregnated on dry bulk fertilizer. See AP-PENDIX II and consult your local dealer for details including what fertilizers are compatible.

As an alternative, Atrazine at recommended rates may be applied preemergence to the soil surface following a preplant incorporated treatment of this product's recommended rates.

If a preemergence application of Atrazine is used, consult the directions on the Atrazine label.

A preemergence application of Atrazine may require a rotary hoeing or shallow cultivation if rainfall or sprinkler irrigation has not occurred within 10 days of the surface application.

With the combination of Atrazine, the potential hazard of Atrazine residues affecting certain crops the following year is reduced because a lower rate of Atrazine can be used.

#### General Use Precautions For Atrazine and Simazine

Follow all the use precautions and warnings that appear on the Atrazine and Simazine labels and supplemental literature.

Make only one application per crop.

After a treatment including Atrazine or Simazine, do not plant any crop except Corn until the following year or injury may occur.

Do not plant Alfalfa where more than 1.2 pounds of actual Atrazine was used the previous year (1.5 pounds 80W or 2.4 pints of 4L).

When Simazine is used in a tank mix, the soil should be thoroughly tilled after harvest. This Fall or Spring tillage will help to minimize possible injury to Spring seeded rotational crops regardless of the rate of Simazine used. Do not apply any tank mixes with Simazine in the High Plains and Intermountain areas of the West where rainfall is sparse and erratic or where irrigation is required. Included in this are central and western Kansas, western Nebraska, western Oklahoma, and the Panhandle of Texas.

Injury may occur to Soybeans planted in north central and northwest Iowa, and south central and southwest Minnesota, northeast Nebraska, southeast South Dakota, and other areas in the year following applications of Simazine on soils having a calcareous surface layer.

Do not plant Sugar beets, Tobacco, vegetables including Dry beans, Spring seed small grains, or small seeded legumes and Grasses the year after an application of Simazine or injury may occur.

### CARRIERS

**Liquids:** The tank mix combinations may be applied using the same liquid carriers as this product used alone. If fluid fertilizers are used, a physical compatibility with these must be done before combining in the spray tank. See Appendix I for details of the compatibility testing procedure. Even if the tank mix is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

**Dry bulk fertilizer:** Tank mixes with Atrazine may be impregnated on dry bulk fertilizer. Simazine is not labeled for dry bulk fertilizer impregnation. Follow all directions and precautions listed under this product applied alone on impregnated dry bulk fertilizer. (See Application Directions)

### ADDING TO SPRAY TANK

It is recommended that the compatibility of any tank mix combination be tested on a small scale, such as a jar test, before actual tank mixing. See Appendix I for details on the procedure for such a test.

Fill a thoroughly rinsed and decontaminated spray tank two-thirds full of clean water.

Start and continue moderate agitation throughout mixing. Excessive agitation may cause the Atrazine or Simazine to settle out and set up in the spray tank.

All return lines to the spray tank must discharge below liquid level.

Mix and disperse wettable powders first, followed by flowable products, and then this product.

For some combinations, premixing wettable powders in a little water in a pail or bucket before adding them to the spray tank will improve the compatibility of the final mixture.

Premix the Atrazine or Simazine individually in proper order listed above making sure they are thoroughly wetted and dispersed in the tank before adding this product.

Add this product to the tank that is two-thirds full of water already mixed with the approved tank mix products and continue filling tank.

The tank mix combinations should not be left in the spray tank for prolonged periods. Batches should be mixed and applied the same day.

### VOLUME

Apply all tank mixes in 20 to 50 gallons of liquid per acre.

### PRESSURE

Use 20 to 40 psi to ensure good distribution in the spray pattern.

### SOIL MOISTURE AND TILTH

Same as for this product alone. (See Application Directions)

### INCORPORATION TIMING

Same as for this product alone. (See Application Directions)

### INCORPORATION EQUIPMENT AND METHODS

Same as for this product alone except for center pivot sprinkler irrigation and subsurface injection. Read and follow all directions and precautions listed under "Application Directions" for center pivot sprinkler irrigation systems. Do not apply Atrazine or Simazine through a center pivot sprinkler irrigation system.

Do not apply any tank mixture through subsurface injection systems.

### PLANTING

Same as for this product alone. (See Application Directions)

### CULTIVATION

Same as for this product alone. (See Application Directions)

Banvel®, 2,4-D, and other herbicides:

A sequential application of 2,4-D or Banvel 4E or other preemergence or postemergence herbicides may be necessary to control weeds resistant to this product.

For enhanced or additional broadleaf weed control, an overlay treatment of 2,4-D or Banvel may be made.

Use the 2,4-D, Banvel 4E, or other herbicide's recommended rate found on the manufacturer's label.

### Table 5: Tank Mixture With Atrazine (Weeds Controlled and Use Rates)

This product plus Atrazine tank mix will control the additional weeds listed below and under unfavorable conditions, improve the control of broadleaf weeds listed in Table 2.

Additional Weeds Controlled with Tank Mix Combinations	Scientific Name	In Tank Mix With This Product*		
		Atrazine 80W	Atrazine 4L	Atrazine 90
Cocklebur, common	<i>Xanthium pensylvanicum</i>	1.25 to 2 lbs.	2 to 3 pts.	1.1 to 1.75 lbs.
Jimsonweed	<i>Datura stramonium</i>			
Kochia	<i>Kochia scoparia</i>			
Mallow, Venice	<i>Hibiscus trionum</i>			
Mustard	<i>Brassica</i> spp.			
Ragweed	<i>Ambrosia</i> spp.			
Smartweed	<i>Polygonum</i> spp.			
Thistle, Russian	<i>Salsola kali</i>			
Velvetleaf	<i>Abutilon theophrasti</i>			
Witchgrass	<i>Panicum capillare</i>			
<b>Comments and Restriction:</b> Use the higher rates of Atrazine on soils with an organic matter content of 5% or higher. For Velvetleaf control, always use 2 pounds of Atrazine 80W or 3 pints of Atrazine 4L.				
*Use recommended rate of this product from Tables 2 or 3 (Eastern and Central Region, use 3.75 to 7.33 pts./acre).				

### Table 6: Tank Mixture with Simazine (Weeds Controlled and Use Rates)

This product plus Simazine tank mix will control the additional weeds listed below and under unfavorable conditions, improve the control of broadleaf weeds listed in Table 2.

Additional Weeds Controlled with Simazine Tank Mix	Scientific Name	In Tank Mix with This Product*		
		Simazine 80W	Simazine 90DF	Simazine 4L
Cocklebur, common	<i>Xanthium pensylvanicum</i>	1.25 to 3.75 lbs./A	1.10 to 3.33 lbs./A	2 to 6 pts./A
Jimsonweed	<i>Datura stramonium</i>			
Ragweed	<i>Ambrosia</i> spp.			
Smartweed	<i>Polygonum</i> spp.			
Thistle, Russian	<i>Salsola kali</i>			
Velvetleaf	<i>Abutilon theophrasti</i>			
<b>Comments and Restrictions:</b> Use the lower rate of Simazine on coarse textured soils. Use the higher rate on fine-textured soils and under heavy broadleaf weed pressure.				
*Use recommended rate of this product from Tables 2 or 3 (Eastern and Central Region, use 3.75 to 7.33 pts./acre).				

## APPENDIX I

### Procedure for Testing the Compatibility of This Product with Fluid Fertilizers and Tank Mix Combinations

The following procedure is suggested for determining whether or not this product may be combined with a specific fluid fertilizer or tank mix herbicide for spray tank application.

#### Materials Required

1. This Product
2. Fluid fertilizer and tank mix herbicides.
3. Adjuvant for spray tank mix combinations: Compex®, MIX®, Unite®, or equivalent. The adjuvant which provides the best emulsification depends on the specific fertilizer and herbicide under consideration.
4. Two one-quart, wide mouth glass jars with lid or stopper.
5. Measuring spoons, a 25 mL pipette or graduated cylinder provides more accurate measurement.
6. Measuring cup, 8 ounces (237 mL).

#### Procedure

Pour a pint or about 473 mL of the fluid fertilizer or water into each of the quart jars.

Add adjuvant to one of the jars and mix. Two-milliliter (mL) or two-fifths of a teaspoon of adjuvant added to 1 pint of fluid fertilizer or water will equal 3 pints of adjuvant per 100 gallons of fluid fertilizer or water.

If a tank mix is being tested, premix the wettable powders in one-eighth cup of water prior to addition to the pint of fluid fertilizer or water.

Add this product to both jars. See Table 7 for rate to use. Close both jars with lid or stopper and mix the contents by turning the jars upside down ten times.

Inspect the surface and body of the mixtures:

- Immediately after completing the jar inversions.
- After allowing the jars to stand quietly for 30 minutes.
- And then again after turning the jars upside down 10 times after the 30-minute wait.

#### Evaluation

If a uniform mixture cannot be made, the mixture should not be used. If either mixture remains uniform for 30 minutes, the combination may be used.

Should either mixture separate after 30 minutes, but readily remixes uniformly with ten jar inversion, the mixture can be used if adequate agitation is maintained in the tank.

If the mixture with adjuvant is satisfactory, but the one without adjuvant is not, be sure to use the adjuvant in the spray tank.

If adjuvant is needed, add it first at a rate of 3 pints per 100 gallons of fluid fertilizer or water.

Foaming can be minimized by using moderate agitation.

If nondispersible oil, sludge, or clumps of solids form in the mixture, the combination should not be used.

**Table 7: Rate Table for This Product in Compatibility Tests**

Gallons of Fluid Fertilizer to be Applied per Acre	Amount of Adjuvant to Add to the 1 Pint of Liquid		mL or Teaspoon to be Added to 1 Pint of Liquid for This Product's rate listed below							
			3.75 Pints		4.75 Pints		6 Pints		7.33 Pints	
			mL	Tsp	mL	Tsp	mL	Tsp	mL	Tsp
10	2	0.4	22.0	4.4	28.0	5.6	35.0	7	42.0	8.5
15	2	0.4	16.0	3.2	20.0	4.0	25.0	5	30.0	6.0
20	2	0.4	13.0	2.6	16.0	3.2	20.0	4	24.0	4.8
25	2	0.4	9.0	1.8	12.0	2.4	15.0	3	18.0	3.6
30	2	0.4	6.0	1.2	8.0	1.6	10.0	2	12.0	2.4
40	2	0.4	6.0	1.2	8.0	1.6	10.0	2	12.0	2.4

## APPENDIX II

### Impregnation on Dry Bulk Fertilizers

Consult you local dealer for more details.

This product alone and tank mix combination with Atrazine may be impregnated on dry bulk fertilizer.

**Caution:** This product alone and in combination tank mixes must not be impregnated on ammonium nitrate, potassium nitrate or sodium nitrate fertilizers. Such mixtures may cause explosion and fire.

All individual state regulations relating to dry bulk fertilizer blending, registration, labeling, and application are the responsibility of the individual and/or company selling the herbicide and fertilizer mixtures.

**Table 8: Approved Dry Bulk Fertilizer Ingredients for Use with This Product Alone**

Fertilizer Ingredient	N	P	K
Ammonium sulfate	21	0	0
Diammonium phosphate	18	46	0
Potassium chloride	0	0	60
Potassium sulfate	0	0	52
Single Super-phosphate	0	20	0
Treble Super-phosphate	0	46	0
Urea*	45	0	0
Ammonium phosphate-sulfate	16	20	0
K-Mag/Sul-Po-Mag	0	0	21
Monoammonium phosphate	11	48	0

\*Some ureas may be phytotoxic when high rates are applied to Corn. Use only urea rates known to be safe for Corn application.

**Table 9: Approved Dry Bulk Fertilizer Ingredients for Use with This Product in Tank Mix Combination with Atrazine**

Fertilizer Ingredient	N	P	K
Ammonium sulfate	21	0	0
Diammonium phosphate	18	46	0
Potassium chloride	0	0	60
Potassium sulfate	0	0	52
Single Super-phosphate	0	20	0
Treble Super-phosphate	0	46	0
Urea*	45	0	0
Ammonium phosphate-sulfate	16	20	0
K-Mag/Sul-Po-Mag	0	0	21
Monoammonium phosphate	11	48	0

\*Some ureas may be phytotoxic when high rates are applied to Corn. Use only urea rates known to be safe for Corn application.

Do not combine this product plus Atrazine 4L or 80W with 0-20-0 or 0-46-0. Uniform impregnation of the herbicides on dry bulk fertilizer particles and uniform application in the field are necessary to assure good results.

A minimum of 200 and a maximum of 700 pounds of approved impregnated ingredients from Tables 8 and 9 must be applied per acre.

Use a closed rotary drum mixer or similar type of closed blender equipped with suitable spray equipment.

The spray nozzle should be positioned inside of the mixer to provide uniform spray coverage of the tumbling fertilizer and provide a uniform fine spray pattern.

Tank mix combinations may be added separately or mixed in the proposed use ratio in a uniform slurry for joint spray impregnation.

Physical properties of fertilizers vary in liquid absorptive capacity. When absorptivity is sufficient, simple spray impregnation of the fertilizer with the herbicides provides a satisfactory, dry mixture.

When the absorptive capacity is not adequate, use of a drying agent is required to provide dry, free-flowing mixtures.

#### Drying agent for spinning-disc applicators

Micro-Cel® E calcium silicate powder

#### Drying agents for pneumatic applicators

Micro-Cel E calcium silicate powder

Agsorb® 16/30 RVM-MS granular clay

Celatom® MP-79

Drying agents should be added separately and uniformly to the previously impregnated herbicide-fertilizer mixture to insure that the mixture is free-flowing. Generally the following amounts are sufficient:

Micro-Cel E calcium silicate powder	less than 2% by weight
Agsorb 16/30 RVM-MS granular clay	less than 5% by weight
Celatom MP-79	less than 5% by weight

The amount of this product and Atrazine actually required in the manufacture of individual fertilizer mixtures should be determined carefully for each production operation (see Table 10). This is necessary to ensure that the amount of herbicide actually contained in the mixture applied to the soil represents the correct use rate.

#### Physical Data

Specific Gravity at 68°F/20°C: 0.972 (typical)

Pounds/Gallon: 8.09 (typical)

Flashpoint: 186°F/86°C (Tagliabue closed cup)

Viscosity: Sprayable down to minus 20°F/-29°C

**Table 10: Rate Chart for Impregnation of Dry Bulk Fertilizer with This Product and Atrazine per Ton of Fertilizer**

Fertilizer Rate (lbs./A)	Rate of This Product per Acre (qts.)			Atrazine Alone in Tank Mix			
				Rate of Atrazine 4L per acre (qts.)		Rate of Atrazine 80W per acre (lbs.)	
	3.75	4.75	7.33	2	3	1.25	2
200	18.75	23.75	36.66	10.00	15.00	12.50	20.00
250	15.00	19.00	29.33	8.00	12.00	10.00	16.00
300	12.50	15.80	24.40	6.66	10.00	8.33	13.33
350	10.75	13.60	21.00	5.75	8.60	7.20	11.40
400	9.40	11.87	18.33	5.00	7.50	6.25	10.00
450	8.33	10.50	16.33	4.50	6.66	5.66	8.87
500	7.50	9.50	14.66	4.00	6.00	5.00	8.00
550	6.80	8.66	13.33	3.66	5.50	4.66	7.33
600	6.25	8.00	12.20	3.33	5.00	4.20	6.66
650	5.75	7.33	11.25	3.20	4.60	3.87	6.20
700	5.33	6.80	10.50	2.87	4.25	3.66	5.60

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage and disposal. Open dumping is prohibited. Keep away from heat and flame.

**PESTICIDE STORAGE:** Keep container tightly closed when not in use. Do not store near seed, fertilizers, or foodstuffs. Can be stored at temperatures as low as minus 50°F.

**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:

**Metal** - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and Local authorities.

**Plastic** - Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Bulk/Mini-Bulk Containers** - When the container is empty, replace the cap and seal all openings that have been opened during use and return the container to the point of purchase, or to an alternate location designated by the registrant at the point of purchase of this product. If not returned to the point of purchase or to a designated location, triple rinse or pressure rinse the empty container and offer for recycling if available.

**Instructions for Users and Refillers** - This container must only be refilled with this pesticide. Do Not Reuse the Container for Any Other Purpose. Do not transport if this container is damaged, leaking, or obsolete, or to obtain information about recycling refillable containers, contact Drexel Chemical Company at (901) 774-4370. Cleaning is not necessary prior to refilling with the same product. Clean container before final disposal. Disposal of this container must be in compliance with state and local regulations.

**Instructions for Refillers** - Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn-out threads and closure devices. Check for leaks after refilling and before transporting. If the container cannot be refilled, triple rinse or pressure rinse the empty container and offer for recycling if available.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!

## WARRANTY—CONDITIONS OF SALE

OUR RECOMMENDATIONS 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. Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith.

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.

Agsorb® is a trademark of Oil Dri Corporation of America

Banvel is a trademark of BASF Corporation

Celatom is a trademark of Eagle-Picher Minerals, Inc.

Compex is a trademark of KALO, Inc.

Micro-Cel is a trademark of Celite Corporation, c/o World Minerals inc.

Mix is a trademark of Drexel Chemical Company

Unite is a trademark of Loveland Industries, Inc.