

Drexel

# Eptek® 7EC

Selective Herbicide - Emulsifiable Liquid

For the control of many annual and perennial grasses, broadleaf weeds and sedges in Alfalfa, Almonds, Birdsfoot Trefoil, Castor Beans, Citrus, Clovers, Cotton, Dry Beans, Green Beans, Lespedeza, Ornamentals, Pine Seedlings, Potatoes (Irish), Safflower, Sugar Beets, Sunflowers, Sweet Potatoes, Tomatoes, and Walnuts.

**ACTIVE INGREDIENT:**

EPTC: S-ethyl dipropylthiocarbamate . . . . 87.8%

**OTHER INGREDIENTS:** . . . . . 12.2%

**TOTAL:** . . . . . 100.0%

This product contains 7 pounds 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. 19713-561

EPA Est. No. 19713-MS-1<sup>A</sup>

EPA Est. No. 19713-KS-1<sup>B</sup>

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

The letter prefix in Lot No. designates producing establishment

### FIRST AID

**IF IN EYES:**

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:**

- 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 ON SKIN:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

**IF INHALED:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a poison control center or doctor for 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 sulfate by injection is antidotal. 2-PAM is also antidotal, but should be administered only in conjunction with atropine.

### 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. Avoid contact with skin. Avoid inhalation of spray mist.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

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

#### Mixers and Loaders 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
- Chemical-resistant apron
- Protective eyewear

#### Applicators and other handlers exposed to the diluted product must wear:

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

In addition to the above PPE, applicators using back pack or hand-held or push type equipment must wear chemical-resistant gloves, such as barrier laminate or nitrile gloves or neoprene rubber or viton.

In addition to long-sleeved shirt and shoes and socks, applicators applying dry bulk fertilizer with a specialized truck designed to treat more than 80 acres must wear a NIOSH approved respirator with an (OV) cartridge, or a canister with any N, R, P, or HE prefilter.

In addition to long-sleeved shirt and shoes and socks, loaders supporting aerial application must wear a NIOSH approved respirator with an (OV) cartridge, or a canister with any N, R, P, or HE prefilter.

In addition to 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, chemical-resistant apron, and protective eyewear; persons Mixing and Loading into chemigation systems, must wear a NIOSH approved respirator with an (OV) cartridge, and a canister with any N, R, P, or HE prefilter.

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 PPE required for mixers/loaders, except shoes may be substituted for chemical-resistant footwear, and have immediately available for use in an accidental spill a NIOSH approved respirator with an (OV) cartridge, and a canister with any N, R, P, or HE prefilter.

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)(5)], the handler PPE requirements may be reduced or modified as specified in the WPS. When reduced PPE is worn because a closed system is being used, handlers must provide all PPE specified above for applicators and other handlers and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

## USER SAFETY RECOMMENDATIONS

**Users should:** 1) Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. 2) Remove clothing 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

This chemical is toxic to mammals. 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 cleaning equipment or disposing of equipment washwater or rinsate.

### AGRICULTURAL CHEMICAL

**DO NOT SHIP OR STORE WITH FOODS, FEEDS, DRUGS, OR CLOTHING.**

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical-resistant gloves, such as barrier laminate, nitrile rubber, neoprene rubber, or viton, shoes plus socks, and protective eyewear.

## NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Do not enter or allow others to enter the treated area until sprays have dried and incorporation (if required) is complete.

## WHERE TO USE

EPTEK 7EC is a selective soil applied herbicide for preemergence control of many annual and perennial grasses, broadleaf weeds and sedges as they germinate in; Alfalfa, Almonds, Birdsfoot Trefoil, Castor Beans, Citrus, Clovers, Cotton, Dry Beans, Green Beans, Lespedeza, Ornamentals, Pine Seedlings, Potatoes (Irish), Safflower, Sugar Beets, Sunflowers, Sweet Potatoes, Tomatoes, and Walnuts.

## GENERAL INFORMATION

### Use Precautions

Apply this product only as specified on this label. Do not apply by aerial application.

This product is formulated as an emulsifiable concentrate containing 7.0 pounds of active EPTC per gallon.

This product is a selective soil applied herbicide for preemergence control of many annual and perennial grasses, broadleaf weeds and sedges as they

germinate, but it will not control established weeds. Established weeds should be controlled before applying this product or by use of an appropriate postemergence herbicide in a tank mix combination treatment with this product. When applied as a spray to the soil surface this product must be incorporated immediately after application. Ideally, application and incorporation should be done simultaneously. Incorporation prevents loss of the herbicide to evaporation. This product may be tank mixed with any product having the same crop use and restrictions allowing co-application. This product treatments may be followed by any registered herbicide for additional weed control.

Follow this product label directions carefully. Over application can result in crop stand loss, crop injury, or excessive soil residues. Uneven application, improper soil incorporation, or soil incorporation deeper than recommended can decrease weed control and/or cause crop injury.

Seedling diseases, cold weather, excessive moisture, shallow or deep planting, low or high soil pH, high soil salt concentration, or drought can weaken seedlings and plants and increase the possibility of crop damage and/or reduced crop yields from use of this product.

To assure uniform application, mix the prescribed amount of this product with a sufficient volume of water to provide thorough coverage of target area. Follow the recommendations given in the "APPLICATION" section of this label.

See the "Plant Back Restrictions" section for information on rotational crop restrictions.

### MIXING

This product readily mixes with water and most liquid fertilizers.

Always check compatibility of this product with liquid fertilizers and other herbicides before full scale application mixing is attempted.

When applying this product alone in water or liquid fertilizer, the spray mixture should be prepared by first placing one-half of the application water or liquid fertilizer into the mix tank. Start agitation and add the required amount of this product. Add remainder of application water or liquid fertilizer. Keep agitating the solution throughout application.

When tank mixing with other pesticide products, use the following guidelines:

1. Check compatibility of tank mix components.
2. Fill mix or spray tank one-half full with clean water (or liquid fertilizer).
3. Begin agitation.
4. Add wettable powder formulations to tank (first pre-slurry in water if applying in liquid fertilizer).
5. Add dry flowable formulations to tank (first pre-slurry in water if applying in liquid fertilizer).
6. Add liquid flowable formulations to tank.
7. Add emulsifiable concentrate formulations to tank.
8. Add this product to tank.
9. Add remainder of water for application.
10. Maintain constant agitation until all of mixture is sprayed.

Check crop use directions in this label for additional tank mix information.

Always check other pesticide labels for additional mixing information and prohibitions.

### APPLICATION SPRAY VOLUME

Apply this product in 10 to 50 gallons of water (20 or more gallons of liquid fertilizer) per acre with conventional spray equipment. Increase spray volumes when treating dense weed foliage or fields containing excessive crop residues to increase penetration and coverage.

Band applications should be equivalent to the broadcast rate and application volume per acre.

**DO NOT** apply this product if wind velocity is high enough to cause drift of the application spray off the target site or irregular spray patterns.

Choose spray nozzles capable of producing spray droplets able to maintain good foliage coverage and weed control. Avoid using nozzles and excessive spray boom pressure that may increase the formation of fine droplets most likely to drift.

### SUBSURFACE INJECTION APPLICATION

Apply this product in 10 or more gallons of water per acre.

**SPECIAL EQUIPMENT DESIGNED FOR SUBSURFACE APPLICATION MUST BE USED.** Injector and sweep units must be rigidly mounted on the planter or cultivation unit. When using sweeps at planting they must be mounted ahead of the planters.

**SOIL INJECTION:** Injector shanks must be spaced 2.5 to 3 inches apart and mounted in staggered positions to avoid trash buildup. Set shanks to inject this product 2 to 3 inches below the soil surface. The width of the band in which weed control is desired will determine the number and spacing of injector shanks required per row. (Example: Four injector shanks spaced 3 inches apart give a 12-inch band.) A broadcast application can be made by increasing the number of shanks. The two shanks adjacent to the drill row must be 1.25 to 1.5 inches on either side of it, EXCEPT IN COTTON WHERE THE DISTANCE MUST BE 4 INCHES ON EITHER SIDE OF THE DRILL ROW, AND SUGAR BEETS WHERE THE DISTANCE MUST BE 2.75 INCHES ON EITHER SIDE OF THE DRILL ROW.

**COVERED SWEEPS:** Set the sweeps to run below the soil surface deep enough to cover this product with 2 to 3 inches of soil. Calibrate by measuring the spray band width at the back of the sweep, not sweep width. For broadcast applications, stagger sweeps on double tool bar so they overlap sufficiently to allow spray bands to meet. **NOTE:** When applying with either injectors or sweeps, this product must be applied deep enough to allow 2 to 3 inches of soil to remain over the treatment after planting operations.

**APPLICATION WITH DRY FERTILIZERS**

This product may be applied via dry fertilizers impregnated with this product and incorporated in the soil before planting for the control of grass and broadleaf weeds. See Tables below for examples of approved dry fertilizers and rates of application.

Approved Dry Fertilizer Ingredients			
	N	P	K
Ammonium Sulfate	21	0	0
Diammonium Phosphate	18	46	0
Potassium Chloride	0	0	60
Potassium Sulfate	0	0	52
Super-phosphate (single)	0	20	0
Super-phosphate (triple)	0	46	0
Urea	45	0	0
Ammonium Phosphate-sulfate	16	20	0
11-48-0	11	48	0

**NOTE:** K-Mag has also been shown to be compatible with this product and is approved for use.

Rate Chart for the Impregnation of Dry Bulk Fertilizers with This Product			
Fertilizer Rate per Acre	This Product Rate per Acre		
	3.5 Pints per Acre	4.5 Pints per Acre	7 Pints per Acre
200 lbs.	17.5 qts./ton	22.3 qts./ton	35 qts./ton
250 lbs.	14 qts./ton	18 qts./ton	28 qts./ton
300 lbs.	11.7 qts./ton	15 qts./ton	23.3 qts./ton
350 lbs.	10 qts./ton	12.9 qts./ton	20 qts./ton
400 lbs.	8.8 qts./ton	11.3 qts./ton	17.2 qts./ton
450 lbs.	7.8 qts./ton	10 qts./ton	15.2 qts./ton
500 lbs.	7 qts./ton	9 qts./ton	14 qts./ton
550 lbs.	6.3 qts./ton	8.2 qts./ton	12.7 qts./ton
600 lbs.	5.9 qts./ton	7.5 qts./ton	11.8 qts./ton
650 lbs.	5.4 qts./ton	7 qts./ton	10.8 qts./ton
700 lbs.	5 qts./ton	6.4 qts./ton	10 qts./ton

Absorb onto a minimum of 200 pounds (maximum of 700 pounds) of approved dry fertilizer to be applied per acre the recommended amount of this product to be applied per acre. Uniform impregnation of this product on dry fertilizer particles and uniform application in the field are necessary to assure good results.

Use a closed rotary-drum mixer or similar type of closed blender equipped with suitable spray equipment for impregnation of this product on dry fertilizers. Spray nozzles should be positioned inside of the mixer to provide a uniform fine spray onto the tumbling fertilizer.

If the absorptive capacity is inadequate, use of a highly absorptive (such as Micro-Cel™ E, Manville Sales Corp.) powder is required to provide a dry, free-flowing mixture. The absorptive powder should be added separately and uniformly to this product/fertilizer mixture in a quantity that provides a free flowing powder. Generally less than 2% by weight of Micro-Cel E is necessary. Coated ammonium nitrate and limestone do not absorb this product and therefore impregnation with these materials should not be attempted.

This product alone or in combination with other herbicides must not be impregnated on ammonium nitrate, sodium nitrate, or potassium nitrate. Such mixtures may cause explosion or fire. Bulk fertilizer impregnated with this product must be applied immediately, NOT STORED. All bulk containers must be tightly covered while the product is being transported and applied to reduce chances of this product loss via volatilization.

The amount of this product actually required in the preparation of fertilizer mixtures should be determined carefully for each production operation. This ensures that the amount of this product actually contained in the mixture applied to the soil represents the correct rate of use.

All label requirements regarding rates per acre, timing of application, soil incorporation, cautions and general use precautions must be followed and are the responsibility of the individual and/or company selling the fertilizer and this product mixture.

**APPLICATION THROUGH IRRIGATION SYSTEMS (CHEMIGATION)**

This product may be applied through sprinkler irrigation systems in labeled crops. Follow all label recommendations for these crops regarding rates per acre, timing of application, special instructions, and precautions.

Apply this product only through a sprinkler including center pivot, flood (basin), or furrow irrigation systems. **DO NOT** apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or excessive (illegal) pesticide residues in the crop can result from nonuniform distribution of treated water.

Calibrate the system with water first to ensure that the amount of this product applied corresponds to the recommended rate per acre.

Apply this product in one-half to three-quarters inches of water during the first sprinkler set. When application is complete, flush the system with water.

Contact State Extension Service specialists, equipment manufacturers, or other experts for additional use information or assistance in system calibration.

**Application Through Irrigation Systems (Chemigation) Connected to Public Water Systems**

1. Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemical application through irrigation (Chemigation) systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. All chemical application through irrigation (Chemigation) systems connected to public water systems must also follow restrictions listed in the following "Special Precautions for Application Through Irrigation Equipment (Chemigation)" section.

**Special Precautions for Application Through Irrigation Equipment (Chemigation)**

1. **DO NOT** connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the safety devices prescribed in this label for public water systems are in place.
2. 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.
3. The system must be free of leaks and clogged nozzles.
4. The pesticide must be supplied continuously for the duration of the aqueous application. An uneven application may cause injury to the crop or poor weed control.
5. Agitation must be maintained in the nurse tank.
6. The sprinkler-chemigation 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.
7. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
8. 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.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
10. 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.
11. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
12. **DO NOT** apply when wind speed favors drift beyond the area intended for treatment.

**RATES**

Follow the recommended rates as directed in the specific crop sections of this label. Use higher label rates when heavy weed populations are anticipated or excessive crop litter remains in the field prior to seedbed preparation or application.

Some rates are dependant upon the different growing conditions found in the United States. Use rates for some crops may vary between regions, check specific crop sections of this label for rate in geographic area treatment is to be made.

**WEEDS CONTROLLED**

This Product will not control established weeds.

ANNUAL GRASSES	
Common Name	Scientific Name
Annual Bluegrass	<i>Poa annua</i>
Annual Ryegrass (Italian Ryegrass)	<i>Lolium multiflorum</i>
Barnyardgrass (Watergrass, Junglerice)	<i>Echinochloa</i> spp.
Bermudagrass (Seedlings)	<i>Cynodon dactylon</i>
Crabgrass	<i>Digitaria</i> spp.
Giant foxtail	<i>Setaria faberi</i>
Goosegrass	<i>Eleusine indica</i>
Green foxtail	<i>Setaria viridis</i>
Johnsongrass (Seedlings)	<i>Sorghum halepense</i>
Lovegrass (Stinkgrass)	<i>Eragrostis ciliaransensis</i>
Panicum, Fall	<i>Panicum dichotomiflorum</i>
Panicum, Texas*	<i>Panicum texanum</i>
Rescuegrass	<i>Bromus catharticus</i>
Sandbur, Field	<i>Cenchrus incertus</i>
Shattercane	<i>Sorghum bicolor</i>
Signalgrass	<i>Brachiaria</i> spp.
Volunteer grains (Barley, Oats, Wheat)*	
Wild oats*	<i>Avena fatua</i>
Witchgrass*	<i>Panicum capillare</i>
Yellow foxtail	<i>Setaria lutescens</i>

\*\*May not be controlled at less than 3.5 pints of this product per acre.

ANNUAL BROADLEAF WEEDS	
Common Name	Scientific Name
Black nightshade*	<i>Solanum nigrum</i>
Carpetweed	<i>Mollugo verticillata</i>
Chickweed, Common	<i>Stellaria media</i>
Corn spurry	<i>Spergula arvensis</i>
Cutleaf nightshade*	<i>Solanum triflorum</i>
Deadnettle (Henbit)	<i>Lamium amplexicaule</i>
Fiddleneck	<i>Amsinckia</i> spp.
Florida pusley	<i>Richardia scabra</i>
Hairy nightshade*	<i>Solanum sarrachoides</i>
Lambsquarters, Common*	<i>Chenopodium album</i>
Nettleleaf, Goosefoot	<i>Chenopodium murale</i>
Purslane, Common	<i>Portulaca oleracea</i>
Prostrate pigweed	<i>Amaranthus blitoides</i>
Prickly Sida*	<i>Sida spinosa</i>
Redroot pigweed (Common pigweed)	<i>Amaranthus retroflexus</i>
Sicklepod*	<i>Cassia obtusifolia</i>
Tall morningglory	<i>Ipomoea purpurea</i>
Tumble pigweed	<i>Amaranthus albus</i>

\*May not be controlled at less than 4.5 pints of this product per acre.

The annual broadleaf weeds listed in the Table above will be controlled only if treatment is made when conditions are favorable for weed germination and growth. Broadleaf weeds may only be suppressed at less than 3.5 pints of this product per acre in heavier soils or under very cold soil conditions.

PERENNIAL WEEDS	
Common Name	Scientific Name
Bermudagrass	<i>Cynodon dactylon</i>
Purple nutsedge*	<i>Cyperus rotundus</i>
Quackgrass	<i>Agropyron repens</i>
Yellow nutsedge*	<i>Cyperus esculentus</i>

\*May not be controlled at less than 3.5 pints of this product per acre.

Perennial weeds must be turned under and chopped up thoroughly prior to treatment. The underground rhizomes of quackgrass and the rhizomes and stolons of bermudagrass must be cut up so that only four or less nodes remain on a strand. For the suppression or control of quackgrass and bermudagrass, the disc must be set to cut 6 inches deep. Use 4.5 to 7 pints of this product for quackgrass and 3.5 to 7 pints for bermudagrass. Incorporate this product by discing or apply in the irrigation water after the rhizomes and stolons have been cut up. **Consult recommendations for crops on which these higher rates may be used.** Nutsedge may not be controlled by water-run applications in heavier soils.

**INCORPORATION** (General Mechanical Incorporation Information)  
Work fields until soil is smooth and clod free before a preplant incorporated application. Check specific crop sections of this label for additional incorporation information and restrictions.

When applied as a spray to the soil surface this product should be incorporated immediately after application. Ideally, application and incorporation should be done simultaneously. Incorporation prevents loss of the herbicide to evaporation. When this product is applied to row crop fields or over seed beds, mechanical incorporation should thoroughly and uniformly blend this product into the top 2 to 3 inches of soil. It is important for desired weed control that incorporation be thorough to provide contact of this product treated soil with germinating weed seeds.

Closely follow incorporation equipment manufacturer's instructions on proper use to achieve desired soil incorporation.

Exercise care when planting to prevent bringing untreated soil to the surface or expose untreated soil in the seedbed or in the furrow.

**PLANT BACK RESTRICTIONS**

Only crops listed on this label can be planted as rotational crops following treatment of a crop with this product. The rotational crop used must have a maximum application rate that is the same or lower than that of the crop that was initially treated with this product.

**REGIONAL USE MAP**



**ALFALFA, BIRDSFOOT TREFOIL, CLOVERS, LESPEDEZA**

**GENERAL INFORMATION**

This product may be used for weed control in Seedling Alfalfa, Birdsfoot Trefoil, Clovers, and Lespedeza and Established Alfalfa and Ladino Clover. Check Application Rate table for allowed regional application methods.

Apply and incorporate the recommended rate of this product per acre just before planting. Temporary crop stunting and sealing of the first leaves will occur if conditions for germination and growth are not optimum, such as a lack of moisture, and will be relieved by irrigation or adequate rainfall.

When applying tank mixtures or sequential applications with this product, always read the companion product label(s) to determine application timing, specific use rate, and weed species controlled. In addition, follow all precautions and restrictions that apply to each product used. Always follow the most restrictive label.

Alfalfa is sensitive to residual amounts of atrazine. Do not use this product on Alfalfa if atrazine was applied within the previous 12 months.

**TIMING**

Apply and incorporate the required rate of this product just before planting Alfalfa, Birdsfoot Trefoil, Clovers, and Lespedeza.

Seedling stands of Alfalfa in the Western and Pacific Northwest regions may be treated with this product metered into irrigation water soon after planting or during stand establishment prior to weed emergence.

Established stands of Alfalfa and Ladino Clover may be treated with this product metered into irrigation water prior to weed emergence.

USE RATES FOR SEEDED ALFALFA, BIRDSFOOT TREFOIL, CLOVERS, AND LESPEDEZA		
Region	Application Methods	Rate (pint)
Northern*	Preplant Incorporated	3.5 to 4.5
Southeast*	Preplant Incorporated	3.5
Southwest	Preplant Incorporated	3.5
Western	Preplant Incorporated	2.25 to 4.5
Pacific Northwest	Preplant Incorporated	2.25 to 4.5

Use the lower rate on very coarse soils

\*For only control of annual grasses from germinating seed in the Northern region, apply and incorporate 2.25 pints before planting.

\*For Fall seeded Alfalfa in South Carolina, apply and incorporate 1.75 pints just before planting.

USE RATES FOR SEEDLING ALFALFA		
Region	Application Methods	Rate (pint)
Western	Irrigation	2.25 to 4.5
Pacific Northwest	Irrigation	2.25 to 3.5 (spring or early summer) 2.25 to 4.5 (late summer or early fall)

Use the lower rate on very coarse soils

USE RATES FOR ESTABLISHED ALFALFA AND LADINO CLOVER		
Region	Application Methods	Rate per Acre (pint)
Northern	Irrigation	2.25 to 3.5
Southwest	Irrigation	2.25 to 3.5
Western	Irrigation	2.25 to 3.5
Pacific Northwest	Irrigation	2.25 to 3.5

Use the lower rates on very coarse textured soils

**Restrictions for Use on Alfalfa, Birdsfoot Trefoil, Clovers and Lespedeza:**

**DO NOT** use this product if a grass or grain nurse crop is to be planted with the legume.

**DO NOT** use on white dutch clover.

**DO NOT** apply this product to fields treated with Atrazine.

**DO NOT** make more than one (1) application per cutting in the Western Region.

**DO NOT** exceed the maximum labeled rate of this product in any region.

**DO NOT** apply within 14 days of harvesting or grazing Alfalfa.

**DO NOT** apply within 15 days of harvesting or grazing Clover, or within 45 days of harvesting or grazing Ladino Clover or Lespedeza.

**DO NOT** apply within 16 days of harvesting or grazing Birdsfoot Trefoil.

**BEANS (Green or Dry)**

**GENERAL INFORMATION**

This product may be used for weed control in Green Beans and Dry Beans. Check Application Rate table for allowed regional application methods.

Under abnormal weather conditions, stunting may occur on gratiot, michilite, sanilac, seafarer, and seaway varieties.

When applying tank mixtures or sequential applications with this product, always read the companion product label(s) to determine application timing, specific use rate, and weed species controlled. In addition, follow all precautions and restrictions that apply to each product used. Always follow the most restrictive label.

**TIMING**

This product may be applied to Beans Preplant, Subsurface Injection, Directed Spray. Dry Beans may also be treated postemergence with this product by metering into Irrigation Water. Check Application Rate table for regional application methods.

**Preplant:** Apply and incorporate the required rate of this product just before planting. If soil crusting, soil compaction, or weeds begin to germinate, shallow cultivation is recommended after emergence of the beans. A fall application can be made to Dry Beans in Minnesota and North Dakota before the ground freezes.

**Subsurface Injection:** Apply preplant or at planting the required rate of this product.

**Directed Spray:** Apply the required rate by directing the spray to the soil at the base of the bean plants before bean pods start to form.

**Irrigation Application (preplant):** In the Pacific Northwest region Beans may be treated by metering in the required rate of this product per acre into irrigation water applied just before or immediately after planting.

**Irrigation Application (postemergence):** Dry Beans may be treated postemergence by metering in the required rate of this product per acre into irrigation water. Irrigation applications should be made prior to bean pod formation.

USE RATES FOR BEANS (Green or Dry)			
Region	Application Method	Rate per Acre (pint)	Maximum Application Rate (pint/acre/crop)
Northern	Fall Application (Dry beans, MN & ND)	4.5 (coarse-textured soil) 5.25 (medium & fine textured soils)	9.75 (3.5 on small White beans or Green beans grown on coarse textured soil)
	At Planting (Pre-plant incorporated, directed)	3.5 to 4.5	
	Lay-by (Directed)	3.5 to 4.5	
	Irrigation (Dry beans, Postemergence)	3.5 to 4.5	
Southeast	At Planting (Pre-plant incorporated, directed)	3.5	7
	Directed Subsurface	2.25	
	Bed Treatments*: Method A - Broadcast, disc in 6 inches deep prior to beds and planting	3.5	
	Method B - Broadcast, (do not disc in) immediately ahead of bedding disc; plant 7 days after treatment	1.75	
	Method C - As band treatment (do not disc in) immediately ahead of bedding disc, or as band treatment to partially formed beds or bed tops immediately in front of rebedding operation	Use a band rate equivalent to 2.25 pints/A broadcast	
	Lay-by (Directed)	3.5	
	Irrigation (Dry beans, Postemergence)	3.5 to 4.5	
Southwest	Preplant OR Subsurface	3.5	7
	Lay-by (Directed) OR Irrigation (Dry beans, Postemergence)	3.5	
		3.5 to 4.5	
		3.5 to 4.5	
Western	Preplant/At Planting (Incorporated) OR Preplant/At Planting (Subsurface)	3.5	8
	Lay-By (Directed)	3.5 to 4.5	
	Subsurface (or in band treatment using 2 shanks/row 5.5 inches apart, centered on the drill row with rows 38 inches apart)	3.5 per broadcast acre (1.75 pints/A)	
	Irrigation (Dry Beans, Postemergence)	3.5 to 4.5	
		3.5 to 4.5	

(Continued)

USE RATES FOR BEANS (Green or Dry)			
Region	Application Method	Rate per Acre (pint)	Maximum Application Rate (pint/acre/crop)
Pacific Northwest	Preplant or At Planting (Incorporated) OR Pre-plant or At Planting (Subsurface)	3.5 to 4.5	9
	Lay-by (Directed)	3.5	
	Subsurface (or in band treatment using 2 shanks/row 5.5 inches apart, centered on the drill row with rows 38 inches apart)	3.5 per broadcast acre (1.75 pints/A)	
	Irrigation (Dry Beans, Postemergence)	3.5 to 4.5	
		3.5 to 4.5	

\*Example: To apply this product as an 18 inch band on 36 inch rows, use 1.25 pints per crop acre. Plant 7 days after application. Note: With Methods B and C, if bed shapers (levelers) are used, the bedding up and shaping should be done so that 3 to 4 inches of soil remain over this product.

**TANK MIXES**

This product may be applied to the beans specified above in combination with the following herbicides for added control provided that the tank mix product is registered for use on the beans being treated.

HERBICIDE	Application
Treflan or other trifluralin EC formulations	Green Beans and Dry Beans
Prowl 4-E or other pendimethalin EC formulations	Dry Beans Only
Lasso 4-E or other alachlor EC formulations	Dry Beans Only
Sonalan EC	Dry Beans Only
Metolachlor EC formulations (i.e. Me-Too-Lachlor™ Herbicide)	Dry Beans Only

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive precautions and restrictions for all products used.

**Restrictions for Use of this product on Green or Dry Beans:**

**DO NOT** apply this product on Adzuki Beans, Cowpeas (black-eyed peas, black-eyed beans), Soybeans, Lima Beans, Mung Beans, Garbanzo Beans, or other flat-podded Beans except Romano.

**DO NOT** exceed the maximum labeled rate this product in any region.

**DO NOT** feed or allow livestock to graze on bean foliage within 45 days of application.

**SUGAR BEETS**

**GENERAL INFORMATION**

This product may be used for weed control in Sugar Beets. Check Application Rate table for allowed regional application methods. This product will not control established weeds. Prior to application, it is recommended that weeds be removed via cultivation or other methods. Under abnormal weather conditions or less than optimum conditions for germination and growth, stunting and crop injury may occur.

When applying tank mixtures or sequential applications of this product, always read the companion product label(s) to determine application timing, specific use rate, and weed species controlled. In addition, follow all precautions and restrictions that apply to each product used. Always follow the most restrictive label.

**TIMING**

This product may be applied to Sugar Beets Preplant/Incorporated, Postemergence Incorporated, Subsurface Injection, and by metering into Irrigation Water.

**Preplant Incorporated:** Apply and incorporate the required rate of this product just before planting in Iowa, Eastern Nebraska, North Dakota, South Dakota, Minnesota, and Michigan. A Fall application can be made to fields located in Minnesota and North Dakota to be planted in Sugar Beets the following Spring. Fall applications should be made before the ground freezes.

**Postemergence Incorporated:** Apply and incorporate the required rate of this product after thinning and clean cultivation. This treatment may follow a fall application located in Minnesota and North Dakota.

**Subsurface Injection (postemergence):** Apply the required rate of this product after the first true Sugar Beet leaves have formed as a broadcast or band application. Apply 2.25 pints this product per crop as a directed spray to the soil in 12-inch bands on both sides of 36-inch rows. 2.25 pints is determined to be the proper rate by calculating the two 12-inch bands in a 36-inch row as the fraction 24/36 multiplied by the broadcast rate of 3.50 pints.

**Irrigation Application (postemergence):** Sugar Beets may be treated postemergence by metering in the required rate of this product per acre into irrigation water after the first true leaves have formed.

USE RATES FOR SUGAR BEETS		
Region	Application Methods	Rate per Acre (pint)
Northern	Preplant Incorporated	2.25 (coarse textured soils) 3.5 (medium & fine textured soils)
	Postemergence Incorporated	3.5
	Subsurface (postemergence)	3.5 (broadcast basis)
	Irrigation (postemergence)	2.25 to 3.5
	Fall Application in Minnesota & North Dakota	4.5 (coarse textured soils) 5.25 (medium & fine textured soils)
Southwest	Postemergence Incorporation (after thinning)	2.25
	Irrigation (after thinning)	2.25 to 3.5
Western	Postemergence Incorporation	3.5
	Subsurface (postemergence)	3.5 (broadcast basis)
	Irrigation (postemergence)	2.25 to 3.5
Pacific Northwest	Postemergence Incorporation	3.5
	Subsurface (postemergence)	3.5 (broadcast basis)
	Irrigation (postemergence)	2.25 to 3.5

#### TANK MIXES

This product may be applied to Sugar Beets in combination with the following herbicides for added control provided that the tank mix product is registered for use on sugar beets.

HERBICIDE	Application Area
Treflan or other Trifluralin EC formulation	California Only
Ro-Neet 6E	Minnesota, Michigan, Red River Valley of North Dakota

Observe all directions, precautions, and restrictions found on labeling of the products used in the tank mix. Follow most restrictive precautions and restrictions for all products used.

#### Restrictions for Use of this product on Sugar Beets:

- DO NOT** exceed the maximum this product labeled rate in any region.
- DO NOT** exceed 3.5 pints of this product per acre per year on Sugar Beets applied through conventional spray equipment. Two applications of 3.5 pints of this product per acre per year may be applied to Sugar Beets using irrigation equipment.
- DO NOT** apply this product within 49 days of harvest.

#### POTATOES (Irish)

##### GENERAL INFORMATION

This product may be used for weed control in Irish Potatoes. Check Application Rate table for allowed regional application methods. This product will not control established weeds. Prior to application, it is recommended that weeds be removed via cultivation or other methods.

The Superior is sensitive to this product and some early season stunting or injury may occur under less than optimum conditions for germination and growth. When applying tank mixtures or sequential applications with this product, always read the companion product label(s) to determine application timing, specific use rate, and weed species controlled. In addition, follow all precautions and restrictions that apply to each product used. Always follow the most restrictive label.

##### TIMING

This product may be applied to Irish Potatoes Preplant Incorporated, Preemergence Incorporated (where "drag-off" cultivation techniques are practiced), Postemergence Incorporated (lay-by and including cultivation techniques where "drag off" is practiced in Potato fields or beds), and by metering into Irrigation Water.

**Preplant Incorporated:** Apply and incorporate the required rate of this product just before planting. Apply as a band treatment for incorporated application to Potato beds.

A Fall application can be made to fields located in Minnesota and North Dakota to be planted in Irish Potatoes the following spring. Fall applications should be made before the ground freezes.

**Preemergence Incorporated:** In fields or beds where "drag off" cultivation techniques are utilized, apply and incorporate the required rate of this product following "drag-off".

**Postemergence Incorporated:** Apply and incorporate to a depth of 2 to 3 inches the required rate of this product after thinning and clean cultivation.

**Postemergence Incorporated (directed "lay-by"):** Apply the required rate of this product as a directed spray to the soil in bands on both sides of Potato row. Immediately cover application with 3 to 4 inches of soil using bedding disks. Emerged weeds should be removed before application.

**Irrigation Application (postemergence):** Potatoes may be treated postemergence by metering in the required rate of this product per acre into irrigation water. Do not apply within 45 days of harvest (within 30 days of harvest for Potatoes treated via irrigation in the Western region).

#### Southeastern Region Potato Bed Techniques:

##### Preplant, Before Bed Formation (Band Application):

Apply as a band, equivalent to 3.5 pints this product per acre broadcast basis. Cover with 3 to 4 inches of soil with bedding discs, middle busters, or other suitable bed-making equipment. Care should be taken not to fold in the band treatment.

##### After Planting but Before Bed Formation:

Apply 1.75 pints this product per broadcast acre over planted crop and bed up immediately with bedding discs set to cover 3 to 4 inches of soil.

##### After Planting and After Bed Formation (Band Application):

Apply this product as a band at a rate equivalent to 3.5 pints of this product per acre, broadcast basis. Rebed immediately after application with bedding discs set to cover with 3 to 4 inches of soil. Care should be taken not to fold in the band treatment.

##### After Planting and After Bed Formation (Broadcast Application):

Apply 1.75 pints this product per broadcast acre. Rebed immediately after application with bedding discs set to cover with 3 to 4 inches of soil.

USE RATES FOR POTATOES (Irish)					
Region	Application Methods	Rate per Acre (pint)	Maximum Application Rate (pint/acre/crop)		
Northern	Fall Application (MN, ND)	5.25 (coarse textured soils) 7 (medium & fine textured soils)	14		
	Preplant Incorporated <b>OR</b> Preemergence Incorporated ("drag-off") <b>OR</b> Postemergence Incorporated ("lay-by") <b>AND/OR</b> Irrigation (Postemergence)	3.5 to 7  3.5 to 7  3.5 to 4.5  3.5			
	Southeastern	Pre-plant Incorporated <b>OR</b> Preplant, Before Bed Formation (band) <b>OR</b> After Planting but Before Bed Formation <b>OR</b> After Planting and After Bed Formation <b>OR</b> After Planting and After Bed Formation <b>OR</b> Drag-off (Come up, Weeding time) <b>OR</b> Postemergence Incorporated ("lay-by") <b>OR</b> Irrigation (Postemergence)		3.5  3.5 (broadcast basis)  1.75  3.5 (broadcast basis)  1.75  3.5  3.5  3.5	3.5
		Southwest		Preplant Incorporated <b>OR</b> Preemergence Incorporated ("drag-off") <b>AND/OR</b> Postemergence ("lay-by") <b>OR</b> Irrigation (Postemergence)	

(Continued)

USE RATES FOR POTATOES (Irish)			
Region	Application Methods	Rate per Acre (pint)	Maximum Application Rate (pint/acre/crop)
Western	Preplant Incorporated	3.5	14
	OR Preemergence Incorporated ("drag-off")	3.5	
	AND/OR Postemergence Incorporated ("lay-by")	3.5 to 4.5	
	OR Irrigation (Postemergence)	3.5	
Pacific Northwest	Preplant Incorporated	3.5 to 7	14
	OR Preemergence Incorporated ("drag-off")	3.5 to 7	
	AND/OR Postemergence Incorporated ("lay-by")	3.5 to 7	
	OR Irrigation (Postemergence)	3.5 to 7	

**Restrictions for Use on Potatoes:**

**DO NOT** exceed the maximum labeled rate of this product in any region.  
**DO NOT** apply to Potatoes within 45 days of harvest (within 30 days of harvest for Potatoes treated via irrigation in the Western region).

**COTTON (Nonirrigated)**

**GENERAL INFORMATION**

This product may be used for weed control in Cotton grown in NONIRRIGATED AREAS ONLY. Check Application Rate table for allowed regional application methods.

Treatment should made Postemergence Subsurface Injection or Postemergence Incorporated as a band application NO CLOSER THAN 4 INCHES TO EITHER SIDE OF THE COTTON DRILL. If treatment is incorporated use a power rotary tiller set 2 to 3 inches deep.

Cotton is susceptible to injury from this product. Carefully follow the directions for use to avoid cotton injury.

**TIMING**

This product may be applied subsurface injection to Cotton as a banded Postemergence or Postemergence Incorporated treatment after Cotton has developed 2 to 4 leaves but before first bolls open.

USE RATES FOR COTTON		
Region	Application Methods	Rate per Acre (pint)
Southeastern	Postemergence Band (Subsurface Injection)	2.25
	Postemergence Band Incorporated	2.25
Southwestern	Postemergence Band (Subsurface Injection)	2.25
	Postemergence Band Incorporated	2.25

Tandem discs may be used to incorporate treatments made to skips in "skip row" cotton.

**Restriction for Use of this product on Cotton:**

**DO NOT** make more than one application of this product per use season.  
**DO NOT** apply to Cotton within 30 days prior to harvest.

**SAFFLOWER**

**GENERAL INFORMATION**

This product may be used for weed control in Safflower. Check Application Rate table for allowed regional application methods.

Treatment should be made Preplant Incorporated just before planting. Limit application to 3.5 pints per acre per growing season.

**TIMING**

**Preplant Incorporated:** Apply and incorporate treatment just before planting.

USE RATES FOR SAFFLOWER		
Region	Application Methods	Rate per Acre (pint)
Northern	Preplant Incorporated	3.5
Western	Preplant Incorporated	3.5
Pacific Northwest	Preplant Incorporated	3.5

**Restrictions for Use on Safflower:**

**DO NOT** exceed application of 3.5 pints per acre of this product per growing season.

**DO NOT** apply within 60 days prior to harvest.

**SUNFLOWERS**

**GENERAL INFORMATION**

This product may be used for weed control in Sunflowers. Use application rates in the following table.

**TIMING**

**Spring Application:** Apply and incorporate just before planting. Use the lower rate on lighter soil.

**Fall Application:** Apply and incorporate in the later Fall before ground freezes. Use the lower rate on coarse textured soil and the higher rate on medium and fine textured soil.

USE RATES FOR SUNFLOWERS IN NORTHERN REGION	
Time of Application	Rate per Acre (pint)
Spring Application (Colorado, Kansas, Minnesota, Nebraska, North Dakota, South Dakota)	2.5 to 3.5
Fall Application (Minnesota, North Dakota)	4.5 to 5.25

**TANKMIXES**

This product may be tank mixed with Trifluralin 4EC Herbicide for broader spectrum weed control and increased control of certain broadleaved weeds. This tank mix combination will give a broader spectrum of weed control than either product used separately.

**Use Precaution:** Read both this product and the Trifluralin 4EC Herbicide labels. Follow the most restrictive label precautions and restrictions.

The following are the additional weeds controlled by combination of this product with Trifluralin 4EC Herbicide:

Annual Grasses	Annual Broadleaves	
Bromegrass	Carpetweed	Puncturevine
Cheatgrass	Kochia	Pigweeds (Spiny)
Sprangletop	Knotweed	Russian thistle
	Lambsquarters	Stinging nettle

**Application Instructions**

Add the recommended rates in the following table of both this product and Trifluralin 4EC Herbicide to the spray tank during filling and mix thoroughly. Apply and incorporate just before planting using the rates listed below. Apply in 10 to 40 gallons of water per acre.

TANKMIXTURE FOR SUNFLOWERS IN NORTHERN REGION				
APPLICATION RATES PER BROADCAST ACRE				
Soil Type	Organic Matter Content (%)	Amount of This Product (pint)	Trifluralin 4EC Rate (pint)	
			Minnesota, Eastern Dakotas	Colorado, Kansas, Nebraska, Western Dakotas
Coarse (Sand)	0 to 2	2.25 to 2.5	1.0	1.0
Coarse (Sand)	2 to 5	2.25 to 2.5	1.5 to 2.0	1.5 to 2.0
Medium (Loam)	0 to 5	2.25 to 2.5	1.5	1.25 to 1.5
Fine (Clay)	0 to 5	2.25 to 2.5	2.0	1.5
All Soil Types	5.1 to 10	2.25 to 2.5	2.0	2.0

**SWEET POTATOES**

**GENERAL INFORMATION**

This product may be used for weed control in Sweet Potatoes. Use application rates in the following table.

**TIMING**

**Preplant:** Apply and incorporate before planting to a maximum depth of 3 inches.

**Preplant —Bed-Over:** Apply just before planting. Treat a band width equal to one-third of the total distance between rows.

Soil from areas adjacent to the band that is not treated is then placed on top of the treated band with bed shaping equipment forming the bed. Band depth in finished and planted bed should be 2 to 4 inches below the bed surface. Bed-over immediately after application.

**Preplant —Bed-Up:** Apply just before planting. After pre-shaped beds have been dragged down, this product is applied broadcast. Soil is then shaped into beds with bed shaping equipment so that undisturbed layer of this product in the finished bed is 2 to 4 inches below the bed surface. Bed-up immediately after application.

**Postplant:** Apply immediately after planting or within 2 days after planting slips or vine cuttings. Apply to a dry soil surface and do not mix into the soil. If Sweet Potatoes are irrigated, this product should be applied prior to irrigation. Apply as a solid overall spray.

USE RATES FOR SWEET POTATOES		
Region	Application Methods	Rate per Acre (pint)
Southeastern, Southwestern	Preplant	Coarse soil: 2.25 Medium & Fine textured soil: 3.5
	OR Pre-plant — Bed-over	Coarse soil: 1.75 Medium & Fine textured soil: 2.25
	OR Pre-plant — Bed-up	Coarse soil: 1.75 Medium & Fine textured soil: 2.25
	OR Postplant	8.5

**CITRUS**

**GENERAL INFORMATION**

This product may be used for weed control in NON-BEARING Citrus groves. This product may be applied to NON-BEARING Orange and Grapefruit nursery stock or young field plantings as a directed spray to the soil. Incorporate as soon as possible after application. Check Application Rate table for allowed regional application methods.

In the Western region, NON-BEARING Lemon groves may be treated with a directed spray application of this product.

Avoid application conditions that may allow spray to contact Citrus foliage.

**TIMING**

**Non-bearing Citrus:** When young trees are lined out, apply 3.5 to 7 pints of this product to the soil and incorporate with cultivation equipment.

USE RATES IN CITRUS			
Region	Citrus	Application Methods	Rate per Acre (pint)
Southeast	Non-bearing Orange, Grapefruit	Directed Spray Incorporated	3.5 to 7
Southwest	Non-bearing Orange, Grapefruit	Directed Spray Incorporated	3.5 to 7
Western	Non-bearing Orange, Grapefruit, Lemon	Directed Spray Incorporated	3.5 to 7

**CASTOR BEANS**

**GENERAL INFORMATION**

This product may be applied as a Preemergence Incorporated treatment for weed control in Castor Beans. Use a rotary hoe or tiller for incorporation.

**TIMING**

**Preemergence Incorporated:** Apply and incorporate treatment just after planting. Early cultivation after application may enhance weed control.

USE RATES IN CASTOR BEANS		
Region	Application Methods	Rate per Acre (pint)
Northern	Preemergence Incorporated	2.25

**Restriction for Use of this product on Castor Beans:**

**DO NOT** make more than one application of this product per use season.

**DO NOT** apply within 16 days of harvest.

**TOMATOES**

**GENERAL INFORMATION**

This product may be used for weed control in Tomatoes as a "lay-by" treatment applied Postemergence Incorporated in Tomatoes grown in the Northern California counties of Butte, Colusa, Contra Costa, Fresno, Glenn, Madera, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter, Yolo, and Yuba. Only Tomatoes grown in these Northern California counties on clay and clay loam soils.

"Lay-by" application should be made as a band treatment no closer than 2 inches to the crop row.

**TIMING**

**Postemergence Incorporated:** Apply and immediately incorporate this product as a "lay-by" treatment when Tomatoes are 3 to 4 inches tall. Early cultivation after application may enhance weed control.

USE RATES IN TOMATOES		
Region	Application Methods	Rate per Acre (pint)
Western (specific California counties listed above)	Postemergence Incorporated	3.5

**Restrictions for Use on Tomatoes:**

**DO NOT** irrigate for 5 days following application.

**DO NOT** apply within 21 days of harvest.

**DO NOT** use this product on Tomatoes grown on sandy soil.

**DO NOT** plant grain within 90 days after treatment.

**DO NOT** make more than one application of this product per use season.

**ALMONDS**

**GENERAL INFORMATION**

This product may be used for weed control in Almonds by applying after the final cultivation of the season.

**TIMING**

Apply this product to Almonds following the final cultivation of the season

USE RATES IN ALMONDS		
Region	Application Methods	Rate per Acre (pint)
Western	Postemergence Irrigation	2.5 to 3.5

**Restrictions for Use on Almonds:**

**DO NOT** make more than two applications of this product per use season.

**DO NOT** apply more than 7 pints per acre per year.

**DO NOT** apply within 16 days of harvest.

**WALNUTS**

**GENERAL INFORMATION**

This product may be used for weed control in well established Walnut trees by metering this product into irrigation water.

Best results are achieved by cultivating soil to remove emerged weeds and bring viable weed seeds to surface before applying this product.

**TIMING**

Apply this product to Walnuts following cultivation to remove emerged weeds.

USE RATES FOR WALNUTS		
Region	Application Methods	Rate per Acre (pint)
Western	Irrigation	3.5
Pacific Northwest	Irrigation	3.5

**Restriction for Use of this product on Walnuts:**

**DO NOT** make more than one application of this product per use season.

**PINE SEEDLING NURSERIES (Loblolly, Slash, Longleaf, Shortleaf)**

USE RECOMMENDATIONS FOR PINE SEEDLING NURSERIES		
Region	Rate per Acre (pint)	Comments
Southeastern	7	Apply and incorporate 14 days prior to seeding.
Southwestern	7	Apply and incorporate 14 days prior to seeding.

**ORNAMENTALS**

**USE INSTRUCTIONS**

**Soil Preparation:** The soil to be treated should be loose and free of clods. All weed growth should be removed or thoroughly worked into the soil before application.

**Application:** The recommended rate of this product should be applied as uniformly as possible. Apply to well-worked soil that is dry enough to permit thorough mixing with incorporation equipment. When treating around established plants, direct spray to soil surface for maximum coverage. Use one of the following appropriate means of application:

**Low Pressure Herbicide Sprayer:** For broadcast application, use 10 to 50 gallons of water per acre. For band application (in front of power tiller), use less water depending upon row spacing and width of band desired. Check pressure and nozzles frequently to assure uniform application.

**Hose Proportioner:** Make sure proportioner is working properly. A more uniform application can be made by applying half the required amount of this product over the area to be treated, then applying the remainder at right angles or crosswise.

**Knapsack Sprayer:** Apply as suggested for the hose proportioner.

**Soil (mixing) Incorporation:** Immediately after application, thoroughly mix this product into the soil to a depth of 2 to 3 inches. Mix to a depth of 6 inches for Nutsedge, Quackgrass, Bermudagrass and Chrysanthemumweed (mugwort) control. Thorough soil mixing is necessary for good weed control.

Use the following equipment or other equipment which has proven satisfactory under local conditions. For Commercial Nursery, use nursery cultivator or rototillers for preplant broadcast (overall) applications, preplant band applications, and postplant applications.

**THIS PRODUCT CAN BE USED ON THE FOLLOWING ORNAMENTALS:**

**HERBACEOUS PLANTS**

Ageratum	Begonia	Marigold
Alyssum	Chrysanthemum	Nasturtium
Amaranthus	Dahlia	Pansy
Asters	Daylilies	Petunia
Balsam	Dianthus	Zinnia

**GROUND COVERS**

Ajuga	Pachysandra
Gazania	Periwinkle ( <i>Vinca minor</i> )
Hypericum	Sedum
Ice Plant	Strawberry (ornamental)
Ivy	

**EVERGREEN AND DECIDUOUS TREES AND SHRUBS**

Azalea	Leucothoe
Berberis	Lilac
Boxwood	Linden
Camellia	Magnolia
Chamaecyparis	Maple
Citrus (Nonbearing)	Oak
Dogwood	Pieris
Euonymus	Pine
Fir	Podocarpus
Hemlock	Rhododendron
Holly (American and Japanese)	Spruce
Juniper	Viburnum
	Yew ( <i>Taxus</i> )

**NOTE:** All flowering bulbs, Salvia, Phlox, Snap-dragon and Ornamental pepper are susceptible to injury from an application of this product.

**Use Precautions:**

This product must be thoroughly mixed into the soil for all Ornamental uses. This product may cause injury to Ornamentals under certain soil and climatic conditions or if directions are not followed.

**TIME OF APPLICATION:**

**Herbaceous Plants and Ground Covers:** Apply 2 weeks after transplanting or after growth starts in the Spring.

**Trees and Shrubs:** Apply 2 weeks before transplanting Balled and Canned stock (only) and anytime after transplanting. Around established plants, apply after growth starts in the Spring.

USE RECOMMENDATIONS FOR ORNAMENTALS		
Type of Control	Rate per Acre (pint)	Comments
For Annual Weed control	5.75	Use 10 to 50 gallons of water per acre (2 fl. ozs./1000 sq. ft.).
For Quackgrass, Nutsedge and Bermuda control in Trees and Shrubs only	7	Use 10 to 50 gallons of water per acre (2.5 fl. ozs./1000 sq. ft.). Existing stands of these perennial grasses must be turned under and thoroughly chopped up before treatment.
For Mugwort (Chrysanthemumweed) control in Juniper, Japanese Holly, Ivy, Pachysandra, Petunias*	17	Use 10 to 50 gallons of water per acre (6 fl. ozs./1000 sq. ft.). Mix thoroughly into the top 6 inches of soil. Apply 4 weeks before the desired planting date.
*Not for use in California		

**STORAGE AND DISPOSAL**

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

**STORAGE:** Do not store this product near fertilizers, seeds, insecticides, or fungicides. Reclose all partially used containers, keep container closed when not in use. Damaged or leaking containers which cannot be used immediately should be transferred to suitable sound containers and properly marked. Can be stored at temperatures down to -50°F. For safety and prevention of unauthorized use, all pesticides should be stored in locked facilities. To prevent accidental misuse, different pesticides should be stored in separate areas with enough distance between to provide clear identification. Opened, partially used pesticides should be stored in original labeled containers when possible. When transfer to another container is necessary because of leakage or damage, carefully mark and identify contents of the new container.

**PESTICIDE DISPOSAL:** Open dumping is prohibited. Pesticide wastes are hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent); then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other means approved by State and local authorities.

**FOR BULK AND 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 a designated location named at the time of purchase of this product. This container must only be refilled with this pesticide product.

**DO NOT REUSE THE CONTAINER FOR ANY OTHER PURPOSE.** 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. Do not transport if this container is damaged or leaking. If the container is damaged, leaking or obsolete, return to the point of purchase or to a designated location. If container can not be returned, triple rinse empty container and offer for recycling. Disposal of this container must be in compliance with state and local regulations.

**DO NOT USE REUSE CONTAINER FOR FOOD, FEED, OR DRINKING WATER.**

**WARRANTY —CONDITIONS OF SALE**

OUR RECOMMENDATIONS FOR USE of this product are based upon tests believe 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 Manufacturer and is accepted as such by the Buyer.