UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

June 18, 2018

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

Subject: Label Amendment – Label updates including adding uses
Product Name: Drexel Trifluralin 4EC Herbicide
EPA Registration Number: 19713-254
Application Date: July 18, 2017
Decision Number: 536920

Dear Ms. Chan:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

with FIFRA section 6. If you have any questions, please contact Emily Schmid at 703-347-0189 or by email at schmid.emily@epa.gov.

Sincerely,

Grant Rowland
Acting Product Manager 23
Herbicide Branch
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

TRIFLURALIN	GROUP	3	HERBICIDE

Trifluralin 4EC

Herbicide

A selective herbicide for pre-emergence control of Annual grasses and Broadleaf weeds.

ACTIVE INGREDIENT:

Trifluralin (α,α,α-trifluoro-2,6-dinitro-N, N-dipropyl-*p*-toluidine)* 44.5%

OTHER INGREDIENTS: 55.5%

TOTAL: 100.0%

*This product contains 4 pounds of Trifluralin per gallon.

**Contains petroleum distillates.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See FIRST AID Below

EPA Reg. No. 19713-254

EPA Est. No. 19713-XX-XXX **Net Content:_____Gals. (_____L)**

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. • Do not give any liquid to the person. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious or convulsing person.
IF ON SKIN OR CLOTHING: • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
IF INHALED: • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.
NOTE TO PHYSICIAN: This product contains an aromatic hydrocarbon and can be extremely harmful if swallowed. Aspiration of this product may produce a severe pneumonitis. Stomach lavage with a cuffed endotracheal tube in place and immediate administration of activated charcoal, 6 to 8 heaping teaspoonful with water, should be considered. Treatment is otherwise symptomatic and supportive.

ACCEPTED

06/18/2018

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 19713-254

Manufactured By:

Drexel Chemical Company

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

SINCE 1972

254SP-0618*P

PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

CAUTION: Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear: Long-sleeve shirt and long pants, socks and shoes and chemical-resistant gloves made of Nitrile, Butyl, Neoprene, and/or barrier laminate.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS

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

USER SAFETY RECOMMENDATIONS

Users should: 1) Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to freshwater marine, and estuarine fish and aquatic invertebrates including shrimp and oysters. Do not apply in a manner which will directly expose canals, lakes, streams, ponds, marshes or estuaries to aerial drift. Do not contaminate water when disposing of equipment washwaters. Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark.

PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read all directions for use before applying this product. 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 and 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 (WPS), 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exemptions 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 WPS.

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 WPS, 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, socks plus shoes and chemical resistant footwear and chemical resistant gloves made of nitrile, butyl, neoprene and/or barrier laminate.

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, 40 CFR Part 170. The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, and greenhouses.
Do not enter treated areas until sprays have dried.

PRODUCT INFORMATION

TRIFLURALIN 4EC is a selective herbicide for the pre-emergence control of Annual grasses and Broadleaf weeds. This product may be applied in liquid sprays of water or liquid fertilizer or impregnated on dry bulk fertilizer. To prevent loss of herbicidal activity, this product must be soil incorporated within 24 hours after application. This product may be tank-mixed or followed by overlay or post-emergence treatment with other herbicides to improve the spectrum of weeds controlled. This product controls weeds by disrupting growth processes during germination. This product does not control established weeds.

Use Precautions:

Applied according to directions and under normal growing conditions, this product will not harm the treated crop. Over-application may result in crop injury or rotational crop damage from soil residue. Uneven application or improper incorporation of this product can result in erratic weed control or crop injury. Seedling disease, cold weather, deep planting, excessive moisture, high salt concentration or drought may weaken crop seedlings and increase the possibility of damage from this product. Under these conditions, delayed crop development or reduced yields may result. Do not apply this product to soils that are wet or are subjected to prolonged periods of flooding as poor weed control may result.

Restrictions: Do not use this product on any crop grown in Pecos County or Reeves County, TX. Do not use in Montana.

Chemigation: This product may be applied by chemigation on certain crops. See instructions for chemigation in the *"CROPS"* section of this label.

WEED RESISTANCE MANAGEMENT

TRIFLURALIN	GROUP	3	HERBICIDE

For resistance management, this product is a Group 3 mode of action herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 3 mode of action herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Appropriate resistance management strategies should be followed.

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

- Rotate the use of this product or other Group 3 herbicides within a growing season sequence or among growing seasons with different herbicide groups that control the same weeds in a field.
- Use tank-mixtures with herbicides from a different group if such use is permitted; where information on resistance in target weed species is available, use the less resistance-prone partner at a rate that will control the target weed(s) equally as well as the more resistance-prone partner. Consult your local extension service or certified crop advisor if you are unsure as to which active ingredient is currently less prone to resistance.
- Adopt an integrated weed-management program for herbicide use that includes scouting and uses historical information related to herbicide use and crop rotation, and that considers tillage (or other mechanical control methods), cultural (e.g., higher crop seeding rates; precision fertilizer application method and timing to favor the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.
- Scout after herbicide application to monitor weed populations for early signs of resistance development. Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.
- If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.
- Contact your local extension specialist or certified crop advisors for additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Drexel Chemical Company representatives at (901) 774-4370.

SPRAY DRIFT INFORMATION

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment-and-weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

The following drift management requirements must be followed to avoid off-target drift movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications, public health uses or to applications using dry formulations.

1. The distance of the outermost nozzles on the bloom must not exceed three-fourths the length of the wingspan or rotor.
2. Nozzles must always point backward parallel with the air stream and never be pointed downwards more than 45 degrees.

Where States have more stringent regulations, they must be observed.

The applicator should be familiar with and take into account the information covered in *"AERIAL DRIFT REDUCTION ADVISORY INFORMATION".*

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

Information on Droplet Size

The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying the larger droplets reduces drift potential, but will not prevent drift if applications are made improperly or under unfavorable environmental conditions (see *"Wind", "Temperature and Humidity"* and *"Temperature Inversions"*).

Controlling the Droplet Size

- **Volume –** Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets.
- **Pressure –** Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Number of Nozzles –** Use the minimum number of nozzles that provide uniform coverage.
- **Nozzle Orientation –** Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential.
- **Nozzle Type –** Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

Boom Length

For some use patterns, reducing the effective boom length to less than three-fourths of the wingspan or rotor length may further reduce drift without reducing swath width.

Application Height

Applications must not be made at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

Swath Adjustment

When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase, with increasing drift potential (higher wind, smaller drops, etc.)

Wind

Drift potential is lowest between wind speeds of 2 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application must be avoided below 2 mph due to variable wind direction and high inversion potential. **Note:** Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity

When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions

Applications must not occur during a local, low level temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This could can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Sensitive Areas

The pesticide must only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas).

MIXING INSTRUCTIONS

This Product Alone: This product may be mixed with water or most liquid fertilizer materials. Prior to mixing this product in liquid fertilizer, refer to the label section entitled *"Testing for Compatibility in Liquid Fertilizers"* for testing procedures to determine compatibility with the liquid fertilizer product to be used. The combination of this product with solution and suspension-type fertilizers provides weed and grass control equal to water sprays. Fill spray tank one-third to one-half full with clean water or liquid fertilizer. Start agitation. Add correct amount of this product and continue agitation while filling tank to required spray volume.

Restriction: Do not allow water or spray mixture to back siphon into a water source.

This Product in Tank-mix: This product may be tank-mixed with other products and applied with water or most liquid fertilizer materials. Prior to mixing tank-mixes containing this product with liquid fertilizer, refer to the label section entitled *"Compatibility Test for Tank-mix Partners Including Fertilizers"* for testing procedures to determine compatibility with the liquid fertilizer product to be used.

Vigorous, continuous agitation during mixing, filling and throughout application is required for all tank-mixes. Sparger pipe agitators generally provide the most effective agitation in spray tanks. To prevent foaming in the spray tank, avoid stirring or splashing air into the spray mixture. To prevent foaming during filling, keep end of fill pipe below the surface of the liquid in the spray tank.

Mixing Order: Fill the spray tank to one-fourth to one-third of the total spray volume required. Start agitation. Add different formulation types in the order indicated below, allowing time for complete mixing and dispersion after addition of each product. Allow extra mixing and dispersion time for dry flowable products. Add different formulation types in the following order: Dry Flowables (DF); Wettable Powders (WP); Aqueous Suspensions (AS); Flowables (F); and Liquids (L). Maintain agitation and fill spray tank to three-fourths of total spray volume. Add this product and other emulsifiable concentrates (EC) and any solutions (S). Finish filing the spray tank. Maintain continuous agitation during mixing, final filling and throughout application. If spraying and agitation must be stopped before the spray tank is empty, the materials may settle to the bottom. Settled materials must be resuspended before spraying is resumed. A sparger agitator is particularly useful for this purpose. Settled material may be more difficult to resuspend than when originally mixed.

Restrictions: Read and carefully follow all label instructions for each material added to the spray tank. Do not allow water or spray mixture to back siphon into a water source.

Pre-mixing: Dry and flowable formulations may be pre-mixed with water (slurried) and added to the spray tank through a 20 to 35 mesh screen. This procedure assures good initial dispersion of these products in liquid fertilizer or water. Line screen in the spray tank should be no finer than 50 mesh (100 mesh is finer than 50 mesh).

Compatibility Test for Tank-mix Partners Including Liquid Fertilizers

If compatibility of this product with the tank-mix partner is not known, perform a jar test prior to tank-mixing this product with other pesticides or liquid fertilizer to ensure compatibility. Use a clear glass quart jar with lid and mix the tank-mix ingredients in their relative proportions and in the order indicated in the tank-mixing section above. Invert the jar containing the mixture several times and observe the mixture for approximately 30 minutes. If components of the mixture separate readily, a compatibility agent may be helpful in maintaining the stability of the spray mixture. If the mixture balls up, forms flakes, sludge, gels, oily films or layers or other precipitates, the components of the mixture are not compatible and full-scale tank-mixing should not be attempted.

Note: Compliance with State regulations for liquid fertilizer mixing, registration, labeling, and application are the responsibility of the individual and/or company offering the fertilizer or chemical mixture for sale.

ROTATION CROP RESTRICTIONS

SUGAR BEETS, RED BEETS AND SPINACH (AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA and WY): Do not plant Red beets, Sugar beets or Spinach for 12 months after a Spring application or 14 months after a Fall application of this product. Plowing to a depth of 12 inches prior to planting these crops will reduce the possibility of crop injury. If land has not been irrigated, do not plant these crops 18 months after a Spring application or 20 months after a Fall application of this product.

All Other Areas: Do not plant Red beets, Sugar beets and Spinach for 12 months after a Spring application or 14 months after a Fall application. Before planting Sugar beets, moldboard plow to a depth of 12 inches to reduce the possibility of crop injury.

PROSO MILLET, CORN, SORGHUM (MILO), OATS AND ANNUAL OR PERENNIAL GRASS CROPS OR GRASS MIXTURES (AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA and WY): Do not plant Proso millet, Corn, Sorghum (Milo), Oats and Annual or Perennial grass crops or grass mixtures for 12 months after a Spring application or 14 months after a Fall application of this product. If land has not been irrigated, do not plant these crops for 18 months after a Spring application or 20 months after a Fall application. Moldboard plowing to a depth of 12 inches before planting these crops will reduce the possibility of crop injury.

(MN, ND and SD): Do not plant Proso millet, Sorghum (Milo), Oats and annual or perennial grass crops or grass mixtures for 18 months after a Spring application or 21 months after a Fall application of this product.

Portions of KS, NE, OK and TX that receive less than 20 inches of rainfall and irrigation to produce a crop: Do not plant Proso millet, Sorghum (Milo), Oats and Annual or Perennial grass crops or grass mixtures for 18 months after an application of this product. In Sorghum, cool, wet weather conditions during early growth stages may increase the possibility of crop injury.

In all other areas receiving more than 20 inches of rainfall and irrigation: Do not plant Proso millet, Sorghum (Milo), Oats, and annual or perennial grass crops or grass mixtures for 12 months after a Spring application or 14 months after a Fall application of this product.

OTHER CROPS

Do not plant vegetable crops other than those to which this product may be applied as a pre-plant soil incorporated treatment within 5 months after an application of this product.

SOIL TEXTURE GUIDE FOR APPLICATION RATES

Rates specified for incorporated treatments of this product are based on *"Soil Texture Class"* (*Coarse, Medium* or *Fine*) and soil organic matter content. A *Fine textured soil* (e.g., *Clay loam*) will require a higher application rate than a *Coarse textured soil* (e.g., *Loamy sand*). In the following table, find the *"Soil Texture Class"* (*Coarse, Medium* or *Fine*) corresponding to the *"Soil Texture to be Treated"*. Choose the proper rate for each application based on the *"Soil Texture Class"* and specific crop directions. Do not exceed specified rates.

Soil Texture Class	Soil Texture to be Treated
Coarse (Light) soils	Sand, Loamy sand, Sandy loam
Medium soils	Loam, Silty clay loam*, Silt loam, Silt, Sandy clay loam*
Fine (Heavy) soils	Clay, Clay loam, Silty clay loam*, Silty clay, Sandy clay, Sandy clay loam*
*Silty clay loam and Sandy clay loam soils are transitional soils and may be classified as either Medium or Fine textured soils. If Silty clay loam or Sandy clay loam soils are predominantly Sand or Silt, they are usually classified as Medium textured soils. If they are predominantly Clay, they are usually classified as Fine textured soils.	

APPLICATION METHODS

As spray volume decreases, the importance of accurate calibration and uniform application increases. Check calibration and uniformity of spray application daily. To avoid spray drift, do not apply when winds are gusting or when wind speed is greater than 15 mph.

Ground Broadcast Application

Apply this product in 5 to 40 gallons of liquid carrier per acre (broadcast basis), using any properly calibrated, low pressure herbicide sprayer that will apply the spray uniformly. The carrier may be water or liquid fertilizer as specified for the crop to be treated in the *"CROPS"* section of this label. For band application, adjust herbicide rate and spray volume in proportion to the band width and row width treated.

Aerial Broadcast Application

Apply this product in 5 to 10 gallons of water per acre. Adjust pump pressure, nozzle arrangements, speed and application height to provide uniform application to the soil surface. Use swath markers or flaggers to assure proper swath width interval.

Application with Dry Bulk Fertilizer

Dry bulk fertilizers impregnated or coated with this product may be applied as a pre-plant incorporated treatment on listed crops. Follow all label directions for this product regarding application rates, incorporation directions, special instructions and precautions. Read and follow all label instructions below concerning use of this product with dry bulk fertilizer. Properly applied dry bulk fertilizers impregnated with this product provides weed and grass control equal to water sprays. Use the following formula to calculate the amount of this product required to impregnate a ton of dry bulk fertilizer.

$$\text{Pints of This Product Per Acre} \times \frac{\text{1000 Lbs. of Fertilizer}}{\text{Acre}} = \text{Quarts of This Product per Ton of Fertilizer}$$

Limitations: Apply a minimum of 200 pounds per acre of dry fertilizer impregnated with this product at the specified broadcast rate per acre. Any commonly used dry fertilizer can be used for impregnation of this product except coated ammonium nitrate and pure limestone. These materials will not absorb the herbicide. Blends containing mixtures of these materials can be impregnated.

Impregnation: Use any closed drum, belt, ribbon or other commonly used dry bulk fertilizer blender. Nozzles used to apply this product to dry bulk fertilizer should be placed to provide uniform spray coverage.

Application and Incorporation: Spread the fertilizer/chemical mixture with properly calibrated application equipment. Be certain the material is applied uniformly to the soil surface. This product should be incorporated 2 times when impregnated on dry bulk fertilizer. The first incorporation should occur within 24 hours after application. The second incorporation should be delayed 3 to 5 days after the first and be completed prior to planting.

Compliance with State Regulations: Compliance with State regulations relating to dry bulk fertilizer blending, registration, labeling and application are the responsibility of the individual and/or company offering the fertilizer or chemical mixture for sale.

Application by Chemigation

This product may be applied through properly equipped chemigation systems for weed control in certain crops as specified in the *"CROPS"* section of this label. Read and follow all label instructions outlined below concerning chemigation before applying this product by this method.

Chemigation Directions: Apply this product only through sprinkler (including micro, center pivot, end tow, side [wheel] roll, traveler, solid set, lateral move, hand move), flood (basin), furrow, border chemigation (soil drench uses) or drip (including surface and subsurface) irrigation systems. Do not apply this product through any other type of irrigation system. Do not apply this product in an irrigation system connected to a public water supply. Public water supply 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.

Crop injury, lack of effectiveness or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. If you have any questions about calibration, you should contact State extension specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system.

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.

Irrigation System Directions:

1. 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 back-flow.
2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. 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.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. 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 that pesticide distribution is adversely affected.
6. 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.

Directions for All Irrigation Systems:

1. Do not allow contact with crop foliage or fruit unless prescribed on the label.
2. Do not apply when wind speed favors drift beyond the area intended for treatment, when system connections leak, or when emitters do not provide uniform distribution.
3. Before use, remove scales, pesticide residues, and other debris from the mix tank and the pump system. Flush system with clean water.
4. Calibration and distribution will be more accurately achieved by injecting a larger volume of a more dilute solution over time. If desired, dilute this product with water prior to injection and mix solution sufficiently to ensure uniform delivery into the injection system. Maintain adequate agitation.
5. Sprinkler systems should be calibrated to deliver a volume of 4 to 50 gallons per hour (gph) per emitter. Apply this product in overhead irrigation equal to 0.5 to 1 inch of water.
6. Drip systems should be set at 0.1 to 3 gph per emitter. The application interval should be such that at one period of time during the injection, the first and last emitters in the system contain water treated with this product.
7. After application is completed, flush equipment with clean water, then continue to irrigate for one to two hours.
8. Mechanical soil incorporation is not required when this product is applied through chemigation systems.

For Application of This Product Through Irrigation Systems for Overall Weed Control (Broadcast):

1. Use sprinkler systems (micro, center pivot, end tow, side (wheel) roll, traveler, solid set, lateral move, and hand move), flood (basin), furrow, and border chemigation (soil drench uses) to apply to crops which permit application by chemigation on this label.
2. Inject this product continuously throughout the chemigation period.
3. Check periodically the chemigation metering pump during application to ensure proper operation.
4. The injection metering pump must be calibrated as specified by the manufacturer.
6. During chemigation, maintain agitation at all times.
7. Apply label-prescribed rates to treated area only. If the irrigation system does not apply treated water to the entire area of the field, adjust the amount of this product used to match the actual treated acreage. (43,560 sq. ft. = 1 acre)

For Control of Break-Through Weeds (including foliage, root, rhizome, or stolon) at Irrigation (Emitter) Points:

Use drip systems (surface and sub-surface) and sprinkler systems (micro, solid set, and hand move) to apply to crops which permit application by chemigation on this label. In this application, rates of this product which are listed as broadcast rates should be prorated to treat only the desired soil area. Do not apply MANA Triflurex HFP in this manner more than 3 times per calendar year.

- **Surface drip and sprinkler applications - (Timing):** Inject this product at the end of the irrigation cycle allowing 1 to 1.5 hours of irrigation following the application to flush lines with clear water. **(Rate Calculation):** For example, apply 2 to 4 pints of this product per acre to the treated area. A treated acre is defined as the surface area wetted by the irrigation system. To calculate the treated acreage, multiply the number of emitters in an irrigation set by the measured square footage of the wetted area of the average emitter, divided by 43,560.
- **Sub-surface drip applications - (Timing):** Charge the irrigation system. Begin application of this product immediately after all emitter points are functional. Shut off the irrigation system immediately following completion of application of this product, allowing this product to bond to the treated soil. Resume irrigation 4 to 8 hours after application of this product. **(Rate Calculation):** For example, apply 2 to 4 pints of this product per treated acre. The treated acreage is defined as the square footage area wetted by the irrigation system during the application period. Multiply the number of emitters (for "leaky hose" type of system, use the linear feet of buried line) per irrigation set by the desired square footage to be treated around each emitter and divide by 43,560. In this type of application, it is usually desirable to treat only 2 to 4 square inches around each irrigation emitter in order to prevent break-through weeds.

Note: Application of this product through irrigation systems as a supplemental weed control practice to suppress break-through weeds including pest foliage, roots, and rhizomes at irrigation emitters will inhibit the formation of root tissues. Improper use of this product may result in yield loss due to weak or deformed root structure in annual and some perennial crops. Make injections of this product after the majority of the root development has occurred but prior to pest presence in the emitter zone.

Visual inspection of the root zone is necessary for proper application timing. Injections of this product should be done separately from normal irrigation practices. For annual crops with "tap" or "bulb" type root structure, bury the drip line off center of the planted row or below the depth of the fully developed tap root or bulb. Injections of this product made early in the crop development or in shallow buried drip lines will result in restricted root development and possible yield loss. Consult your local Farm Advisor, P.C.A. or Manufacturer for proper use of this product.

Chemigation System Calibration (Sample Calculation for Use of This Product in a Chemigation System): Assume, in this example, 133 acres are to be covered by a chemigation treatment. Product required, assuming 1.5 pints per acre is 199.5 pints (133 acres x 1.5 pts. per acre = 199.5 pts. = 25 gals.). Add 25 gallons of product directly to the injection supply tank. Adjust the injection system to deliver 25 gallons during the time required to apply 1 inch of water to 133 acres.

If the irrigation system requires 20 hours to apply 1 inch of water to 133 acres, the injection rate is 1.25 gallons per hour and is calculated as follows:

25 gals. ÷ 20 hours = 1.25 gals. per hour 1.25 gals. per hour = 160 fl. ozs. per hour
Proper calibration requires the injection pump to be adjusted to deliver 2.7 fl. ozs. per minute and is calculated as follows: 160 fl. ozs. per hour ÷ 60 minutes per hour = 2.7 fl. ozs. per minute

Chemigation Mixing Directions

Undiluted: When used alone, the injection of undiluted product is recommended in chemigation systems. For undiluted use, the metering pump, supply tank and any associated equipment must be thoroughly clean and dry before this product is added to the system for injection. When injecting undiluted product, maintain continuous agitation in the supply tank.

Diluted: This product may be diluted if required to achieve accurate calibration for existing equipment. Partially fill the injection supply tank with a volume of water equal to the amount of this product required (Do not add water to this product). Start agitation. Add the required amount of this product to water in the supply tank and continue mixing while filling the tank to the final volume required by the injection pump calibration. When injecting diluted product, maintain continuous agitation in supply tank.

APPLICATION TIMING

Spring Application: Apply and incorporate this product any time after January 1 when soil can be worked and is in a condition which allows thorough mixing to ensure uniform incorporation. See *"CROPS"* section for application timing and directions for specified crops.

Fall Application: Fall application can be used for all crops for which this product is specified as a pre-plant incorporated treatment. Refer to *"CROPS"* section for any crop specific Fall application instructions. In the States of California, Minnesota, North Dakota and South Dakota apply and incorporate this product any time between September 1 and December 31. In all other States, Fall apply this product between October 15 and December 31. Ground may be bedded up over Winter. On bedded ground, reduce beds to desired height before planting, by moving some treated soil from beds into furrows. Where soil is left flat over Winter, care should be taken not to turn up untreated soil during Spring bedding operations. Destroy established weeds during seedbed preparation. Weeds established in furrows as a result of exposing untreated soil should be destroyed before planting. Do not make Fall application on fields which remain wet or subject to periods of flooding.

Pre-emergence Application Immediately After Planting: Apply and incorporate this product immediately after planting and prior to crop germination. Adjust incorporation equipment so as not to disturb planted seed. Refer to the *"CROPS"* section of this label for crop specific instructions.

Post-emergence and Lay-by Application: Apply and incorporate this product at the specified rate to the established crop at or before the last cultivation. Required pre-harvest intervals for treatments with this product for certain crops are specified in the *"CROPS"* section of this label. Crop cover may prevent uniform soil coverage from over-the-top sprays. To avoid this problem, use drop nozzles or directed sprays to achieve uniform soil coverage.

INCORPORATION DIRECTIONS

Soil Preparation and Incorporation: Ground cover, such as crop residues or existing weeds, can interfere with uniform soil incorporation of this product. A manageable level of ground cover will allow uniform incorporation into the top 2 to 3 inches of soil. Ground cover and crop residues, if excessive, should be reduced by appropriate soil tillage prior to application. Break up clods using tillage equipment prior to application of this product. This product must be incorporated within 24 hours after application. With most equipment and methods of application, a second incorporation is required and may occur any time before planting. The second incorporation should be in a different direction, and to avoid bringing untreated soil to the surface, should not be deeper than the first. **Note: Two-pass incorporation is required for all special use programs unless otherwise specified.**

Soil Conditions: The soil surface should be smooth enough to allow for uniform application and efficient incorporation of this product. Apply when soil moisture is sufficient to allow the breakup of large clods and uniform mixing during the incorporation process. Soil compaction and/or non-uniform incorporation may occur if soil is excessively moist.

Incorporation in Bedded Culture: In bedded culture, this product should be incorporated to a depth of 2 to 3 inches in the final seedbed.

Application Prior to Bedding: Apply this product and incorporate one time with recommended equipment. The bedding operation serves as the second incorporation. Do not expose untreated soil during post-bedding operations such as planting since removal of treated soil during planting can allow weed germination and establishment in the drill row.

Application After Bedding: Knock off beds to planting height before applying this product. Apply and incorporate this product with recommended equipment that will conform to the shape of the bed. Do not expose untreated soil.

Cultivation After Planting: Treated crops may be shallowly cultivated without reducing the weed control activity of this product. Limit depth of cultivation to the zone of treated soil (2 to 3 inches) to avoid moving untreated soil to the surface. Exposure of untreated soil may cause loss of weed control.

INCORPORATION EQUIPMENT

Use incorporation equipment capable of mixing this product uniformly into the top 2 to 3 inches of the final seedbed. Use of inappropriate equipment or improper use of recommended equipment may result in erratic weed control and/or crop injury. Incorporation equipment such as a tandem disc will mix this product approximately half as deep as the equipment is set to operate. For example, a disc set to cut four inches deep will mix most of this product within the top 2 inches of soil. Any recommended incorporation implement may be used alone or in combination with any other recommended implement. Two incorporation passes are required unless otherwise specified.

Tandem Disc: Set equipment to cut 4 to 6 inches deep and operate at 4 to 6 mph.

Field Cultivator: Set equipment to cut 3 to 4 inches deep and operate at a minimum of 5 mph. A field cultivator is defined as an implement with 3 to 4 rows of sweeps, spaced at intervals of 7 inches or less and staggered so that no soil is left unturned. Chisel points should not be used.

Combination Seedbed Conditioners: These implements are defined as two or more tillage devices combined to operate as a single tillage unit. For example, 2 to 3 rows of field cultivator C- or S- shaped shanks with an effective sweep spacing of 6 to 9 inches, (staggered so that no soil is left unturned), followed by a spike-tooth or flextine harrow, followed by a ground driven reel or basket. Combination implements should be set to cut 3 to 4 inches deep and operated at a minimum of 6 mph. This product can be incorporated with one pass when using a combination seedbed conditioner. Two incorporation's are required under conditions which prevent optimum soil mixing such as excessive trash, roughness, high clay content or soil moisture.

Rolling Cultivator: Set equipment to cut 2 to 4 inches deep and operate at 6 to 8 mph. Generally, rolling cultivators are adequate for use only on *Coarse* and *Medium soils*. In Sugarcane, the rolling cultivator may be used on *Fine textured soils*.

Bed Conditioner (Do-All): Set equipment to cut 2 to 4 inches deep and operate at 4 to 6 mph. One incorporation pass is adequate in bedded culture, while two incorporation passes are required in flat planted culture. The do-all should be used only on *Coarse* and *Medium textured soils*.

Mulch Treader and other similar Disc-type Implements: Set equipment to cut 3 to 4 inches deep and operate at 5 to 8 mph.

Other Equipment: Other implements including the flexible fine-tooth harrow (Flextine or Melroe), are recommended, but only for certain uses defined in the *"CROPS"* section of this label.

Conservation Tillage Practices: In reduced or minimum tillage situations, Fall or Spring application and incorporation of this product may be combined with tillage operations. The first incorporation may utilize equipment such as a tandem disc, combination implement or bedding equipment that provides good soil mixing but leaves a maximum amount of crop residue on the soil surface. The second incorporation may be accomplished with tillage equipment that provides uniform soil mixing used in conjunction with no-till planters. (See specific directions for reduced or conservation tillage situations for Cotton and Soybeans in the *"CROPS"* section.)

Single Pass Incorporation Option

This product may be incorporated in a single pass if incorporation conditions allow for thorough and uniform mixing into the top 2 to 3 inches of the final seedbed. Thorough and uniform incorporation may be achieved if the soil at the time of incorporation is of food tilth with moderate moisture, and is relatively free of clods and crop residue.

The following types of equipment can be used to obtain thorough and uniform soil mixing from a single incorporation pass:

Finishing disc with disc blades no greater than 22 inches in diameter, spaced no more than 7.5 inches apart. Operate at 4 to 6 mph. Best results are obtained when the disc is equipped with harrow, reel, or basket attachments.

Field Cultivator: Set equipment to cut 3 to 4 inches deep and operate at a minimum of 5 mph. A field cultivator is defined as an implement with 3 to 4 rows of sweeps, spaced at intervals of 7 inches or less with sweeps on successive rows staggered so that no soil is left unturned. Chisel points should not be used. Best results are obtained when the field cultivator is equipped with harrow, reel, or basket attachments.

Combination Implements: These implements are defined as 2 or more tillage devices combined to operate as a single tillage unit. For example, 2 to 3 rows or field cultivator C- or S-shaped shanks with successive rows of sweeps staggered so that no soil is left unturned, followed by a spike-tooth or flextine harrow, followed by ground driven reel, basket or incorporator wheels. Combination implements should be set to cut 3 to 4 inches deep and operated at a minimum of 6 mph. Two incorporations are recommended under conditions which prevent optimum soil mixing, such as excessive surface residue, roughness, high clay content, or soil is too wet or too dry. Combination tools can also be composed of 2 rows of wide crown sweeps that overlap so that the roots of all weeds and plants are severed. This should be followed by 2 gangs of rotating spoked wheels that thoroughly mix this product into the top 2 to 3 inches of the final seedbed.

P.T.O. Driven Equipment (tillers, cultivators, hoes): Adjust equipment to incorporate this product into the top 2 to 3 inches of the final seedbed with rotor spaced to provide a clean sweep of the soil. P.T.O. equipment should not be operated more than 4 mph.

WEEDS CONTROLLED BY THIS PRODUCT

GRASS WEEDS	
Common Name	**Scientific Name**
Annual bluegrass	*Poa annua*
Barnyardgrass (Watergrass)	*Echinochloa crus-galli*
Brachiaria (Signalgrass)	*Brachiaria* spp.
Bromegrass (Cheatgrass, Downy brome)	*Bromus tectorum*
Cheat (Chess)	*Bromus secalinus*
Crabgrass (Large crabgrass, Smooth crabgrass)	*Digitaria* spp.
Foxtail (Bottlegrass, Bristlegrass, Giant foxtail, Green foxtail, Foxtail millet, Pigeongrass, Robust foxtail, Yellow foxtail)	*Setaria* spp.
Guineagrass[1]	*Panicum maximum*
Itchgrass (Raoulgrass)[1]	*Rottboellia cochinchinensis*
Johnsongrass (from seed) (rhizome)[2]	*Sorghum halepense*

Junglerice	*Echinochloa colonum*
Oats, Wild[3]	*Avena fatua*
Panicum (Fall panicum, Spreading panicgrass)[4]	*Panicum dichotomiflorum*
Red rice[5]	*Oryza sativa*
Ryegrass, Italian (Annual ryegrass)	*Lolium multiflorum*
Sandbur (Burgrass)	*Cenchrus incertus*
Shattercane (Wild cane)[6]	*Sorghum bicolor*
Sprangletop	*Leptochloa filiformis*
Stinkgrass (Lovegrass)	*Eragrostis cilianensis*
Texas panicum (Buffalograss, Coloradograss)	*Panicum texanum*
Woolly cupgrass	*Eriochloa villosa*

[1] See special instructions for control in Sugarcane in the *"CROPS"* section.
[2] See special instructions for rhizome control in Cotton, Soybeans, fruit and nut crops and vineyards, and trees grown for pulp in the *"CROPS"* section.
[3] When applied as a pre-plant incorporated treatment, this product controls Wild oats that germinate in the treated zone. Wild oat control is not claimed for incorporated uses in small grains.
[4] See special instructions for control in Cotton and Soybeans in the *"CROPS"* section for spreading panicgrass.
[5] See special instructions for suppression or partial control in Soybeans in the *"CROPS"* section.
[6] See special instructions for control in Soybeans in the *"CROPS"* section.

BROADLEAF WEEDS

Common Name	Scientific Name
Carpetweed	*Mollugo verticillata*
Chickweed	*Stellaria media*
Field bindweed[1]	*Convolvulus arvensis*
Goosefoot	*Chenopodium hybridium*
Henbit	*Lamium amplexicaule*
Knotweed	*Polygonum aviculare*
Kochia (Fireweed, Mexican fireweed)	*Kochia scoparia*
Lambsquarter, Common	*Chenopodium album*
Pigweed (Carelessweed, Palmer amaranth*, Prostrate pigweed, Redroot, Rough pigweed, Spiny pigweed)[2]	*Amarathus* spp.
Puncturevine (Caltrop, Goatweed) (Western U.S. only)	*Tribulus terrestris*
Purslane, Common	*Portulaca oleracea*
Pusley, Florida (Florida purslane, Mexican clover, Pusley)	*Richardia scabra*
Russian thistle (Tumbleweed)	*Salsola iberica*
Stinging nettle (Nettle)	*Urtica dioica*

[1] See special instructions for control in fruit and nut crops and vineyards in the *"CROPS"* section.
[2] See special instructions for control in Soybeans in *"CROPS"* section.
* Suppression only in areas of the Southwest U.S. where tolerance to trifluralin has been observed. Consult your local extension service or Manufacturer for information regarding alternative weed control practices.

SPECIAL USE PROGRAMS

This product is approved for the following special use programs. Refer to *"CROPS"* section of this label for details on soil preparation, use rates, application, soil incorporation and precautions for each type of program.

COTTON

Additional weed and grass control (Gulf Coast Counties of Texas) Chemigation	Fall Panicum control Pigweed and Seedling Johnsongrass control	Rhizome Johnsongrass control Weed control in Conservation Tillage

FRUIT AND NUT CROPS AND VINEYARDS

Field Bindweed control	Rhizome Johnsongrass control

SOYBEANS

Additional weed and grass control (Gulf Coast Counties of Texas) Charcoal soils in AR, LA, MS & TX Chemigation Fall Panicum control	Itchgrass (Raoulgrass) suppression Pigweed and Seedling Johnsongrass control Red Rice control in AR, LA, MS & TX Rhizome Johnsongrass control	Weed control under Reduced or Conservation Tillage Wild Cane (Shattercane) control

CROPS

ALFALFA (ESTABLISHED)

Mechanically Incorporated

Apply this product with ground or aerial equipment and mechanically incorporate prior to weed emergence to control weeds listed in the *"WEEDS CONTROLLED BY THIS PRODUCT"* section of this label. Use mechanical incorporation equipment that will ensure thorough soil mixing with minimal damage to crop stand.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5
Medium	2
Fine	2

Surface Applications (Chemigation or Water Incorporated)

This product may be surface applied for annual grass control in established Alfalfa by chemigation or ground or aerial broadcast application equipment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Soil Textures	4

Chemigation

Refer to *"Chemigation Directions"* under the section *"APPLICATION METHODS"*.

Surface Applications Activated by Rainfall or Irrigation

Broadcast surface applications of this product to established Alfalfa may be activated by rainfall, sprinkler, flood or furrow irrigation. Rainfall or a single overhead sprinkler irrigation of 0.5 acre inch or more is required to activate this product.

If activated by furrow irrigation, care should be taken to thoroughly wet beds between furrows. If rainfall or irrigation has not occurred within 3 days after application, this product may be mechanically incorporated. If mechanically incorporated, use equipment that will ensure thorough soil mixing with minimum damage to the established Alfalfa.

Application Timing and Weeds Controlled

Applications to established Alfalfa for Annual grass control can be made during dormancy or semi-dormancy or during the growing season immediately after a cutting. Because this product does not control established weeds, application must be made prior to the expected time of weed germination. Bromegrass and Cheat begin to germinate in the Fall with the onset of cooler weather. To control these weeds, apply this product immediately after a cutting between August 1 and October 1, but prior to weed germination. When Fall applied, this product controls Bromegrass and Cheat in addition to other labeled weeds that germinate after application.

The following weeds are controlled when this product is applied by chemigation or surface applied and incorporated by rainfall or irrigation:

Barnyardgrass Bromegrass (Cheatgrass, Cheat, Chess, Downy brome)	Canarygrass Crabgrass Cupgrass Foxtail	Junglerice Sandbur Wild barley

Restrictions

Apply no more than 4 pints of this product (2 lbs. a.i.) per application. Do not apply within 21 days before harvest of forage, or 20 days before harvest of hay. Do not apply more than 8 pints of this product (4 lbs. a.i.) per acre per year.

Tank-mix Combinations

Other products registered for use on established Alfalfa may be ground broadcast in tank-mix combination with this product or applied as sequential treatment following application of this product. Tank-mixes containing this product must be applied when Alfalfa is dormant or semi-dormant or immediately after a cutting.

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

ASPARAGUS (ESTABLISHED)

Apply this product to established Asparagus as a single or split application. This product will suppress Volunteer seedling asparagus and Field bindweed when applied as directed. Follow the soil preparation, application and incorporation procedures for this product.

Application Timing: Make applications to dormant Asparagus in Winter or early Spring after mature ferns have been removed. Do not apply after new spears begin to emerge. Apply post-harvest application immediately after harvest in late Spring or early Summer just before ferns are allowed to develop.

BROADCAST APPLICATION RATES PER ACRE		
Soil Texture	**Split Application Before and After Harvest (Pts. / Ac.)**	**Single Application Before or After Harvest (Pts. / Ac.)**
Coarse	1+1	2
Medium	1.5 + 1.5	3
Fine	2 + 2	4
Do not apply more than the dosage listed above during any calendar year.		

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

BEANS - ALL DRY AND FRESH BEANS/PEAS EXCEPT GUAR*, LIMA*, MUNGBEAN*, PEAS (DRY, ENGLISH, SOUTHERN PEAS)*, SNAP*

*For use directions for these crops, refer to their sections on this label.

This Product Alone

Apply and incorporate this product in the Spring before planting or in the Fall. See instructions for Fall application of this product under the *"APPLICATION TIMING"* section of this label.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Tank-mixing or Sequential Treatments

For broader spectrum weed control, other products registered for use in dry and fresh Beans may be applied in tank-mix combination with this product or as a sequential treatment following application of this product. When tank-mixing, use the labeled rate of this product. Follow the label's *"DIRECTIONS FOR USE"* of each tank-mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank-mixing in the *"MIXING INSTRUCTIONS"* section of this label.

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

BEANS (GUAR AND MUNGBEAN)

This Product Alone

Apply this product as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	1.5
All soils with 2% to 5% organic matter – Use 1.5 pints.	

BEANS (LIMA AND SNAP)

Apply this product as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1
Fine	1.5
All soils with 2% to 5% organic matter – Use 1.5 pints.	

CARROTS

Apply this product as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in range in areas receiving less than 20 inches total annual rainfall and irrigation.	

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

CASTOR BEANS

Apply this product as soil incorporated treatment, before or immediately after planting. If applied and incorporated after planting, set equipment so as to not disturb the seed.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in range in areas receiving less than 20 inches total annual rainfall and irrigation.	

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

CELERY

Apply this product as a soil incorporated treatment. This product may be applied to direct seeded or transplant Celery before planting, at-planting or immediately after planting.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in range in areas receiving less than 20 inches total annual rainfall and irrigation.	

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

CHICORY / ENDIVE

This product may be applied as a pre-plant incorporated treatment to Chicory grown either as a root crop or leafy vegetable as indicated below:

Cichorium intybus, considered to be a root crop, may yield the following:
Chicory – the dried and processed root used as a coffee substitute.
Radicchio – green leaves harvested from field grown plantings.
Belgian endive – white leaves grown in the dark, growth from field grown rootstalks.

Cichorium endiva, considered to be a leafy vegetable, may yield the following:
Escarole – curly green leaves from field grown plantings.
Endive – very curly green leaves from field grown plantings.

Apply this product as a soil incorporated treatment in Spring or early Summer prior to planting. Apply and incorporate this product according to directions on the label for this product.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter.	

COLE CROPS (BROCCOLI, BRUSSELS SPROUTS, CABBAGE, AND CAULIFLOWER)

Direct Seeded Cole Crops

Apply this product as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1
Fine	1.5
Use 1.5 pints for soils with 2 to 5% organic matter.	

Precautions: Direct seeded Cole crops exhibit marginal tolerance to higher than specified rates of this product. Stunting or reduced stands may occur.

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

Transplanted Cole Crops

Apply and incorporate this product prior to transplanting.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in range in areas receiving less than 20 inches total annual rainfall and irrigation.	

CORN (FIELD CORN ONLY)

Post-emergence Incorporated Treatment

Apply this product as a post-emergence treatment following cultivation and/or use of a pre-emergence herbicide. This product does not control established weeds. Apply when crop is well established (2 true leaf stage or taller). Apply as an over-the-top spray or as a directed spray using drop nozzles if foliage prevents uniform coverage of the soil surface.

Incorporation Directions: Application of this product must be mechanically incorporated within 24 hours. Mechanical incorporation may be accomplished with one pass of a sweep-type cultivator or properly adjusted rolling cultivator. The sweep-type cultivator should have 3 to 5 sweeps per row middle and be operated at a speed that will provide vigorous soil mixing. Set middle sweeps so as to avoid exposing untreated soil. Adjust incorporation equipment so as to avoid mechanical injury to the crop.

Water as Option in *Coarse* and *Medium Textured Soils*: On *Coarse* and *Medium textured soils*, this product may be incorporated by continuous rainfall or sprinkler irrigation amounting to at least 0.5 to 1 inch of water. Best results are obtained if application is made immediately after a cultivation when the soil surface is open and porous. Rainfall or sprinkler irrigation prior to application will tend to consolidate and seal the soil surface and prevent the downward movement of this product that is expected under porous, open, recently till conditions. Supplemental irrigation can be

applied through a center pivot, solid set, or hand moved sprinkler system. Do not use furrow irrigation. Mechanically incorporate as described above if the required amount of rainfall or sprinkler irrigation does not occur within 24 hours after application.

BROADCAST APPLICATION RATES PER ACRE*	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	0.75 to 1**
Medium	1.25 to 1.5
Fine	1.5 to 2
*Apply lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation. **Apply 1 to 1.5 pints per acre on Coarse soils in AL, FL, GA, NC, SC and VA to control Fall panicum and TX panicum.	

Precautions: Crop injury may occur if this product is applied to Corn as a pre-plant or pre-emergence treatment. Where Corn is planted in a furrow, apply this product only after cultivation to move soil into the row.

Restrictions: Do not apply to Pop corn, Sweet corn or Corn grown for seed. Do not apply this product 6 weeks prior to harvesting forage, fodder, or silage, or after Corn is 30 inches tall.

Chemigation

This product may be applied through properly equipped chemigation systems for weed control in Field corn. Refer to *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label. Do not apply this product through any type of irrigation system unless these directions are carefully followed.

Application Timing: Apply this product in 0.5 to 1 acre inch of sprinkler irrigation when Field corn is at the 2 true leaf stage of growth or taller. Apply this product prior to weed emergence or after existing weeds have been controlled with herbicides or cultivation. This product does not control established weeds.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5 to 2
Medium	1.5 to 2
Fine	Do not apply this product by chemigation to Fine textured soils.

Precautions: Where Corn is planted in furrow, this product should be applied only after a cultivation to move soil into the row. Do not apply this product to Corn as a pre-plant or pre-emergence treatment as crop injury may occur.

Restrictions: Do not apply this product to Popcorn, Sweet corn or Corn grown for seed. Do not apply this product within 6 weeks prior to harvesting forage, fodder, or silage, or after Corn is 30 inches tall.

This Product in Tank-mixture With Atrazine

This product may be applied in tank-mix combination with Atrazine plus an emulsifiable oil or oil concentrate when Corn is at the 2 leaf stage of growth or taller and weeds are no more than 1.5 inches in height. A period of 24 to 48 hours is required to obtain Atrazine post-emergence activity after which the pre-emergence activity of this product plus Atrazine combination may be activated by 0.5 inch or more of rainfall or overhead sprinkler irrigation or mechanical incorporation. Use the application rates and incorporation methods for this product specified under *"Post-emergence Incorporated Treatment"* in the *"CORN (FIELD CORN ONLY)"* section of this label.

Refer to the product label for Atrazine for application rates, additional use directions, precautions and limitations before use.

COTTON

Application Timing

This product may be applied for weed control in Cotton before planting, immediately after planting, to established crop up to lay-by or in the Fall in advance of Spring planting.

How to Apply

This product may be applied and soil incorporated or it may be applied through chemigation (see *"Chemigation"* in this section).

Follow the soil preparation, application and incorporation procedures in the *"INCORPORATION DIRECTIONS"* section of this label. For Fall application, in addition to the directions below, refer to instructions in the *"APPLICATION TIMING"* section of this label. For lay-by application, refer to instructions in the *"Lay-by Application"* section below.
If incorporating after planting, incorporate this product soon after planting and set equipment so as to avoid disturbing planted Cottonseed.
For band applications, reduce the application rate in proportion to the row spacing and bandwidth treated. For example, treating a 12 inch band where the row spacing is 36 inches would require one-third of the specified broadcast rate per acre (12 inches divided by 36 inches = 1/3).

Tank-mixing or Sequential Treatments

For broader spectrum weed control, other products registered for use in Cotton may be applied in tank-mix combination with this product or as a sequential treatment following application of this product. When tank-mixing, use the labeled rate of this product. Follow the label *"DIRECTIONS FOR USE"* of each tank-mix partner for applicable use instructions including application rate, application timing, weeds controlled and specific precautions and restrictions of product use. See detailed information for tank-mixing in the *"MIXING INSTRUCTIONS"* section of this label.

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

Conventional Tillage Cotton

BROADCAST APPLICATION RATES PER ACRE			
Soil Texture	**This Product**		
	Spring Application* (Pts.)	**Fall Application (Pts.)**	
		Eastern U.S.**	**Western U.S.*****
Coarse	1	2	1.5
Medium	1.25 to 1.5	2	2
Fine	1.5 to 2	2.5	2.5

* Spring Application: On Coarse and Medium soils with 2 to 5% organic matter, use 1.5 pints per acre. On Fine soils with 2 to 5% organic matter use 2 pints per acre. On all soils with 5 to 10% organic matter use 2 to 2.5 pints per acre. Use lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation.
** Fall Application: For Eastern U.S. including AL, AR, northern FL, GA, LA, MS, southeastern MO (Bootheel), NC, NM, OK, SC, TN and TX.
*** Fall Application: For Western U.S. including Arizona and California.
For Fall application in all other States and areas not listed in the above footnotes, apply this product at the Spring application rate, using the higher rate where a range is given.

Minimum Tillage Cotton (Conservation Tillage Cotton)

Strip Planting into Small Grain Cover Crops

Fall planted cover crops may be utilized to control wind erosion and protect developing crop seedlings from wind damage. Prior to planting cotton, the cover crop may be treated with a contact herbicide to prevent continued growth and development and prevent competition with crop seedling for water and soil nutrients. The standing cover crop (now dead) continues to control wind erosion and provide protection to the developing crop until it is well established.

Strip Planting

In strip planting, cotton is seeded into competition-free bands established in the cover crop. Competition-free bands may be established by leaving unseeded drill rows when seeding the cover crop, by tillage, or by use of a contact herbicide to prepare competition-free bands prior to planting.

Fall Application Prior to Establishing a Cover Crop

Small grain cover crops (Barley, Rye or Wheat) may be established following a pre-plant incorporated application of this product. Apply this product to flat ground at a broadcast rate of 2 to 3 pints per acre. Use the 3 pints per acre rate where crop residues are present or where dense weed populations are anticipated. Incorporate once within 24 hours using incorporation implements, such as a springtooth harrow, set to cut no more than 2 to 3 inches deep. DO NOT INCORPORATE WITH A TANDEM DISC. Form beds with disc bedders or other bedding implements that will mix and move most of the treated soil from the furrow area to the beds.

Phosphate and other fertilizer may be applied as appropriate during incorporation operations. Plant 2 to 4 rows of a small grain cover crop, such as Barley, Rye or Wheat, 2 inches deep in the furrow area between the beds. To avoid injury to small grain seedlings, place seed below the treated layer of soil. Barley is more tolerant to injury than Wheat or Rye. Existing soil moisture must be present to establish and maintain the cover crop. In later Winter (February), apply 2,4-D if necessary for Broadleaf weed control.

Spring Application Before or After Planting

Apply this product as a broadcast treatment or as a band to bare ground or standing dead cover following burndown with a post-emergence herbicide. This product may be applied and incorporated either before planting or after planting prior to crop emergence. If applied after planting, incorporate immediately and set incorporate equipment to operate at a depth that will not disturb the planted seed. If this product is applied as a band, adapt incorporation equipment to the width of the treated band and use equipment that will uniformly mix this product into the top 1 inch of soil. Be aware, that compared to double pass incorporation, weed control may be reduced when using single pass incorporation; or, if using equipment that does not provide thorough soil mixing.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1 to 2
Medium	1.5 to 2
Fine	2 to 4
Use the lower application rate in the specified range when additional sequential applications of this product are anticipated. Use the higher application rate where crop residues are present and where dense weed populations are anticipated.	

Chemigation

This product may be applied through properly equipped chemigation systems for weed control in Cotton. Refer to *"Application by Chemigation"* in the *"APPLICATION METHODS"* section for chemigation use directions. Do not apply this product through any type of irrigation system unless these directions are carefully followed. This product in overhead sprinkler irrigation equal to 0.5 to 1 inch of water. This product must be applied within 2 days after planting and prior to crop emergence. Because this product does not control established weeds, planting and application should occur as soon as possible after the last tillage operation. Soil incorporation is not required when this product is applied through chemigation systems.

Cultivation: Soil treated by chemigation with this product may be shallow cultivated without reducing weed control activity.
Refer to *"Application by Chemigation"* in the *"APPLICATION METHODS"* section of this label for use directions for chemigation. Apply this product only through the kinds of sprinkler irrigation systems specified in that section of the label.

BROADCAST APPLICATION RATES PER ACRE		
Soil Texture	**This Product**	
	Conventional Tillage (Pts. / Ac.)	**Minimum Tillage* (Pts. / Ac.)**
Coarse	1	1 to 3
Medium	1.5	1.5 to 4
Fine	2	2 to 4
* In minimum tillage situations, use the lower application rate in the specified range when additional sequential applications of this product are anticipated. Use the higher application rate when a large amount of crop residue is present, where dense weed populations are anticipated, or when additional sequential applications will not be made		

Rotational Crop Restrictions After Chemigation

Conventional Tillage: Refer to the *"ROTATIONAL CROP RESTRICTIONS"* section of this label.
Minimum Tillage: In addition to the restrictions listed in the *"ROTATIONAL CROP RESTRICTIONS"* section of this label, do not plant Grain sorghum in the year following the application of this product.

Lay-by Application

Lay-by application may be made in established Cotton after the 4-true leaf growth stage, but no later than 90 days before harvest. Apply this product uniformly to the soil surface using drop nozzles if necessary. Incorporate into soil using one pass of a sweep-type cultivator or properly adjusted rolling cultivator. Operate cultivation equipment at speeds sufficient to provide vigorous soil mixing, and exercise care to avoid mechanical injury to the crop. Compared to conventional double pass incorporation, weed control may be reduced when using single incorporation, or if using equipment that does not provide through soil mixing. The lay-by application rate must not exceed the rate given in the lay-by table below for each soil texture.

LAY-BY BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	2

Special Use Programs

Fall Panicum Control
Apply as pre-plant incorporated treatment at a broadcast rate of 2 pints per acre on both *Coarse* and *Medium soils*.

Pigweed and Seedling Johnsongrass Control
Apply this product as a pre-plant incorporated treatment in AL, AR, FL, GA, LA, MS, Southeastern MO (Bootheel), NC, SC, TN and Southern VA.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1 to 1.5
Medium	1.5 to 2
Fine	2
Exception: LA where 3 pints per acre can be applied to Fine soils. Use higher rates in the rate range where high weed populations are anticipated.	

Additional Weed and Grass Control (Gulf Coast counties of TX)
Apply this product as a pre-plant incorporated treatment up to 2 weeks before planting in Brazoria, Calhoun, Chambers, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller and Wharton counties of the Texas Gulf Coast.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5
Medium	2
Fine	3

Rhizome johnsongrass Control (For use in all Cotton producing States except AZ and CA)
Rhizome johnsongrass control with this product requires the maximum application rates for 2 consecutive years. Commercially acceptable control cannot be obtained with only one year of applying the maximum rate of this product. Carefully follow all special use directions.

Soil Preparation: Satisfactory results are dependent upon proper preparation of soil prior to application. Chisel plow to bring rhizomes to the soil surface. Disc twice before application to chop rhizomes into small (2 to 3 inch) pieces and destroy any recently emerged Johnsongrass plants.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	2
Medium	3
Fine	4

Spring Application: Apply this product any time before planting in the Spring for 2 years in succession.
Fall Application: Apply this product between October 15 and December 31 for 2 years in succession.
Incorporation: Deep incorporation with a tandem disc is essential for good results. Set disc to operate 4 to 6 inches deep and operate at 4 to 6 mph. Two incorporation passes are necessary and the second should be in a different direction than the first.
Cultivation: Some Johnsongrass plants will not be controlled. Timely cultivation during the crop season is necessary to remove escaped plants and maintain commercially acceptable control.
Precaution: In the season following a maximum rate treatment, plant only Rice or those crops for which this product can be applied as a pre-plant treatment or crop injury may occur.

Restrictions and Use Precautions

Precautions: To avoid crop injury, plant Cotton after early season adverse weather conditions have passed, especially when using high rates. Cool, wet weather early in the growth cycle causes stress to the Cotton plant. The added stress may result in reduced stand, delayed maturity, and reduced yields.

Maximum Crop Year Use Rates: For full season weed control, this product may be applied one or more times sequentially during the crop year observing the rates, methods of application, and a 90 day pre-harvest interval. The maximum dosage must not exceed the rates given, and **the maximum cumulative amount of this product that may be applied within the same crop year (includes Fall application or Spring application plus lay-by application) must not exceed 4 pints per acre (2 lbs. a.i. per acre).**

Rotation Crop Restrictions: Refer to *"ROTATION CROP RESTRICTIONS"* section for specific rotational crop restrictions. When the cumulative amount of this product in one crop year (Fall or Spring plus lay-by) exceeds the rates in the table below, plant only those crops for which this product is labeled as a pre-plant incorporated treatment in the season following the application of this product, or crop injury may result.

Soil Texture	Cumulative Amount of This Product in One Crop Year (Pts. / Ac.)
Coarse	1.5
Medium	1.5
Fine	2

A small grain cover crop such as Barley, Rye or Wheat that is intended for prevention of wind erosion in Minimum Tillage Cotton may be planted in the Fall following a maximum crop year use rate of 4 pints per acre of this product; however, reduced stand and delayed emergence and development of the cover crop may result. The cover crop must not be grazed or harvested.

CUCURBITS

Apply this product after emergence when plants have reached the 3 to 4 true leaf stage of growth. Apply as a directed spray to soil between the rows. Avoid foliage contact as slight crop injury may occur. Set incorporation equipment to move treated soil around the base of the plants.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Restriction: Do not apply within 30 days of harvest, except for Watermelon which has a 60 day pre-harvest interval.

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

EGGPLANT

Apply and incorporate this product before transplanting. Incorporate to a depth of 3 inches. Do not make more than one application per season.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Precaution: Avoid transplanting until soil temperatures have warmed in late Spring.

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

FLAX (FALL APPLICATIONS ONLY)

Apply and incorporate this product in the Fall for weed control in Spring seeded Flax. Incorporate once within 24 hours after application. The second incorporation may be performed in the Spring prior to planting.

SPECIAL INSTRUCTIONS FOR USE IN FLAX

1. Incorporation operations or other tillage practices performed in the Spring prior to seeding should be relatively shallow so as to maintain a firm seedbed and the seedbed should be packed prior to seeding.
2. Seeding should be done with a press drill or hoe drill. Seed into moist seedbed and plant no more than 1.5 inches deep.
3. Delay seeding until soil has warmed sufficiently to allow rapid germination and establishment.
4. Refer to *"Use Precautions"* in the *"PRODUCT INFORMATION"* section of this label for information on growing conditions that can lead to crop injury or yield reduction.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	2

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

FORAGE LEGUMES

Forage Legumes used as Cover Crops or in the Acreage Conservation Reserve Program (CRP)

Apply this product as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1 to 1.5
Fine	2
Use the lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Precautions: Some crop stand reduction may occur with this use; however, reduced weed competition will allow establishment of a quality stand.

Restriction: If used under the Acreage Conservation Reserve Program (CRP), follow the most severe grazing restrictions imposed by the USDA Conservation Use Program. Consult the local ASCS committee or other State agency to determine the period of the USDA grazing restriction.

GRAIN SORGHUM (MILO)

Post-emergence Incorporated Treatment

Apply this product as a directed or over-the-top spray when Grain sorghum is 8 inches tall or taller. Drop nozzles should be used if foliage prevents uniform soil coverage.

Soil Preparation: Cultivate before application of this product to remove established weeds and to cover the base of Grain sorghum plants with soil. Cultivation equipment should be set to add approximately 1 inch of soil to the base of Sorghum plants.

Incorporation Directions: Application of this product must be mechanically incorporated within 24 hours after application. Mechanical incorporation may be accomplished with one pass of a sweep-type cultivator or properly adjusted rolling cultivator. Sweep-type cultivators should have 3 to 5 sweeps per row per middle and be operated at a speed that will provide vigorous soil mixing. Set middle sweeps so as to avoid exposing untreated soil. Adjust incorporation equipment so as to avoid mechanical injury to the crop.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	0.75 to 1
Medium	1 to 1.5
Fine	1.5 to 2
Apply this product at lower rate in range in areas receiving less than 20 inches total rainfall and irrigation.	

Precautions: Crop injury will occur if this product is applied to Grain sorghum as a pre-plant or pre-emergence treatment. Over-application may result in injury to Grain sorghum

Restriction: Do not apply after Grain sorghum is 24 inches tall.

Chemigation

This product may be applied through properly equipped chemigation systems for weed control in Grain sorghum 8 to 24 inches tall. Refer to *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label for chemigation use directions. Do not apply this product through any irrigation system unless these directions are carefully followed.

Soil Preparation: Cultivate before application of this product to destroy existing weeds and cover the base of the Grain sorghum plants with soil. Cultivation equipment should be set to add approximately 1 inch of soil to the base of Sorghum plants.

Application Timing: Apply this product to Grain sorghum in 0.5 to 1 acre inch of overhead sprinkler irrigation as soon as possible after a cultivation when Grain sorghum is at least 8 inches tall. This product must be applied prior to weed emergence or after existing weeds are controlled. This product does not control established weeds.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	0.75 to 1
Medium	1 to 1.5
Fine	Do not apply this product by chemigation to Fine textured soils.

Restriction: Do not apply after Grain sorghum is 24 inches tall.

This Product In Tank-Mixture with Atrazine

This product may be applied in tank-mix combination with Atrazine plus an emulsifiable oil or oil concentrate when Grain sorghum is 8 inches tall or taller and weeds are no more than 1.5 inches in height. A period of 24 to 48 hours is required to obtain post-emergence activity of Atrazine after which the pre-emergence activity of this product plus Atrazine combination may be activated by 0.5 inch or more of sprinkler irrigation or mechanical incorporation. Use application rates and incorporation methods for this product specified under *"Post-emergence Incorporated Treatment"* in the *"GRAIN SORGHUM (MILO)"* section of this label.

Precautions: Where Grain sorghum is planted in a furrow, this product should be applied only after cultivation to move soil into the row.

Restriction: Refer to the product label for Atrazine for application rates, additional use directions, precautions and limitations before use.

GREENS (FRESH, FOR PROCESSING OR GROWN FOR SEED): COLLARD, KALE, MUSTARD, AND TURNIP GREENS

Apply this product to greens as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	1.5
Use 1.5 pints for soils with 2 to 10% organic matter.	

[Optional] Chemigation (For Collards, Kale, Mustard and Turnip Greens Grown for Processing)

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

HOPS

Apply and incorporate this product to established crop during dormancy. Use incorporation equipment that will ensure thorough soil mixing with minimal damage to crop stand.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5
Use 1.5 pints for soils with 2 to 10% organic matter.	

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

KENAF

Apply this product as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE*	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse**	1
Medium	1.0 to 1.5
Fine	1.5
*Use the higher rate in rate range where high weed populations are anticipated. ** Coarse soils with 2 to 5% organic matter – use 1.5 pints per acre.	

Restriction: Do not graze or harvest treated crop for livestock forage.

LUPINE

Apply and incorporate this product before planting.

BROADCAST APPLICATION RATES PER ACRE*	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse**	1
Medium**	1.25 to 1.5
Fine**	1.5 to 2.0
* Use the lower rate in rate range for areas receiving less than 20 inches of total annual rainfall and irrigation. ** Coarse and medium soils with 2 to 5% organic matter – use 1.5 pints per acre. Fine soils with 2 to 5% organic matter and soils with 5 to 10% organic matter, use 2.0 pints per acre.	

MINT (ESTABLISHED PEPPERMINT AND SPEARMINT)

Use incorporation equipment that will ensure thorough soil mixing with minimum damage to the crop.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25
Fine	1.5

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

MUSTARD (GROWN FOR SEED OR PROCESSED FOOD)

Apply this product to Mustard as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	1.5
Use 1.5 pints for soils with 2 to 10% organic matter.	

OKRA

Apply this product as a soil incorporated treatment before or immediately after planting. If applied and incorporated after planting, set equipment so as to not disturb the seed.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall or irrigation.	

ONIONS (DRY BULBS ONLY)

Post-emergence Lay-by Application

Apply at lay-by to soil between Onion rows. Avoid applying to the tops or exposed bulbs.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	0.75 to 1
Medium	1 to 1.5
Apply only to soils 3.5% or less organic matter. Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall or irrigation or where light weed pressure is anticipated.	

Incorporation: Incorporate by operating sweep-type or rolling cultivator. Set equipment to cut 2 to 4 inches deep and operate at 6 to 8 mph. Two incorporation passes are required with the first occurring within 24 hours after application or erratic weed control may result. Avoid covering exposed Onion bulbs with treated soil during incorporation as crop injury may occur. Avoid injury to crop roots during incorporation.

Precautions: When applied according to directions under normal growing conditions, this product will not adversely affect Onions. Diseases, improper incorporation depth, excessive moisture, high salt concentration or drought may weaken the crop and increase the possibility of damage from this product. Under these conditions, delayed crop development or reduced yields may result.

Restrictions: Do not apply within 60 days of harvest. Do not apply as pre-plant or pre-emergence treatment. Do not apply to *Muck soil*.

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

ORNAMENTALS

Apply and mechanically incorporate this product prior to planting new nursery stock liners, ornamentals, trees and woody shrubs, and gladioli. Gladioli corms less than 1-inch diameter may be injured by pre-plant applications. This product may also be applied to these and other listed ornamentals (see below) after they are established. When mechanically incorporated after planting, the implement should be adjusted so that treated soil is thrown toward and around the plants in the row

Broadcast Application Rates/Acre

Soil Texture	This Product
Coarse	1.0 pt.
Medium	1.5 pt.
Fine	2.0 pts.

Ornamental Groundcover Plantings

For the indicated ornamental groundcovers, apply 1 gallon per acre (3 ounces per 1000 square feet) of this product in 5 to 40 gallons of water per acre and incorporate within 24 hours with at least a one-half inch rain or its equivalent in sprinkler irrigation.

Woody Shrubs	Trees	Groundcover
Andromeda, Japanese	Almond	Aaronsbeard
Arborvitae, American	Apple, Crabapple	Bellflower, Adriatic
Azalea	Apricot	Bellflower, Poscharsky
Barberry, Japanese	Ash, White	Ceanothus
Barberry, Mento	Bald Cypress	Coreopsis
Boxwood, Common	Birch, European White	Cotoneaster
Boxwood, Harlands	Black gum	Coyote Brush
Boxwood, Littleleaf	Cherry	Crown Vetch
Camellia, Japanese	Chestnut, Chinese	Daisy, Trailing African
Camellia, Sasanqua	Cottonwood	Fern, Asparagus
Cherry Laurel, American	Dogwood, Flowering	Gazania
Cinquefoil	Dogwood, Kousa	Germander
Cleyera, Japanese	Douglas Fir	Ice Plant, Largeleaf
Cotoneaster, Cranberry	Fir, Balsam	Ivy, Algerian
Cotoneaster, Zabel	Hemlock, Canada	Ivy, English
Deutzia	Honey Locust	Lily-of-the-Nile
Elaegnus, Silverberry	Larch, Japanese	Lillyturf, Bigblue
Euonvmus, Spreading	Locust, Black	Marigold
Euonymus, Winged	Maple, Norway	Myoporum
Euonymus, Wintercreeper	Maple, Red	Plumbago, Dwarf
Firethorn	Maple, Silver	Rockrose
Forsythia	Maple, Sugar	Rosemary
Guava, Pineapple	Oak, Pin	Rupturewort
Holly	Oak, Red	Snow-in-Summer
Honeysuckle	Oak, Scarlet	Speedwell
India Hawthorn	Peach	St. Johnswort
Juniper	Pine, Austrian	Stonecrop (Sedum)
Laurel, "Mountain"	Pine, Easter White	Strawberry , "Beach
Lilac, Common	Pine, Japanese Black	Thrift
Mock Orange	Pine, Loblolly	Verbena
Pittosporum, Japanese	Pine, Red	Wirevine, Creeping
Privet	Pine, Scotch	Yarrow, Wolly

Red Cedar, Eastern	Planetree, London	Zoysiagrass
Rhododendron	Plum	
Spiraea, Vanhoutte	Redbud, Eastern	
Viburnum	Spruce, Colorado	
Weigela	Spruce, Norway	
Willow	Spruce, White	
Yew, Anglojap	Sweet Gum	
Yew, Japanese	Sycamore	
Yew, Pine	Tulip Tree	
	Walnut, Black	

Roses and Other Established Flowers

African Daisy	Gaillardia	Rose
Aster (perennial)	Gladiolus	Salvia
Balsam	Golden Glow	Shasta Daisy
Black-eyed Susan	Impatiens	Snapdragon
Calendula	Ixora	Snow-on-the-mountain
Carnation	Lobelia	Stock
Centaurea, Velvet	Lupine	Sunflower
Chrysanthemum	Marigold	Sweet Alyssum
Coreopsis	Marigold, Cape	Sweet Pea
Cornflower	Morningglory	Sweet Sultan
Cosmos Dahlia	Nasturtium	Sweet William
Dianthus	Petunia	Vinca
Dusty Miller	Phlox	Yarrow
Floss Flower	Pincushion Flower	Zinnia
Forget-me-not	Poppy, California	
Four O'clock	Portulaca	

PEANUTS (OK, NM and TX)

This Product Alone

Apply and incorporate this product before planting, at-planting or immediately after planting. When incorporating after planting, adjust equipment so as not to disturb planted seed.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5

Tank-mixing or Sequential Treatments

For broader spectrum weed control, other products registered for use in Peanuts may be applied in tank-mix combination with this product or as a sequential treatment following application of this product. When tank-mixing, use the specified rate of this product. Follow the label *"DIRECTIONS FOR USE"* of each tank-mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank-mixing in the *"MIXING INSTRUCTIONS"* section of this label.

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

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label. For tank-mixes with this product, follow the label directions, restrictions and precautions for both products concerning chemigation. Do not use tank-mixes for chemigation when not permitted on either label.]

PEAS (DRY AND ENGLISH PEAS)

This Product Alone

Apply and incorporate this product in the Spring before planting or in the Fall. Refer to instructions for Fall application under *"APPLICATION TIMING"* section of this label.

BROADCAST APPLICATION RATES PER ACRE		
Soil Texture	**This Product**	
	Spring Application (Pts. / Ac.)	**Fall Application* (Pts. / Ac.)**
Coarse	1	1
Medium	1 to 1.5**	1.25 to 1.5
Fine	1.5	1.5
Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation. * This product may be Fall applied to Dry and English peas in the States of ID, OR and WA. ** Medium soils with 3% or more organic matter, use 1.5 pints.		

Tank-mixing or Sequential Treatments

For broader spectrum weed control, other products registered for use in Dry and English peas may be applied in tank-mix combination with this product or as a sequential treatment following application of this product. When tank-mixing, use the specified rate of this product. Follow the label *"DIRECTIONS FOR USE"* of each tank-mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank-mixing in the *"PRODUCT INFORMATION"* section of this label.

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

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label. For tank-mixes with this product, follow the label directions, restrictions and precautions for both products concerning chemigation. Do not use tank-mixes for chemigation when not permitted on either label.]

PEAS (SOUTHERN PEAS)

Apply as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for all soils with 5 to 10% organic matter. Use lower rate (in the rate range) in areas receiving less than 20 inches total annual rainfall or irrigation.	

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

PEPPERS (TRANSPLANT ONLY)

Apply and incorporate this product prior to transplanting.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate (in the rate range) in areas receiving less than 20 inches total annual rainfall or irrigation.	

POTATOES (NOT FOR USE IN THE STATE OF ME)

This Product Alone

Apply and incorporate this product after planting prior to crop emergence, immediately following drag-off, or after Potato plants have fully emerged.

Incorporation: Set incorporation equipment so that the bed and furrow are uniformly covered with a layer of treated soil. If the layer of treated soil is not uniform and the herbicide is concentrated over the bed, Potato emergence may be retarded and stem brittleness can occur. When applying and incorporating this product after Potato plants have fully emerged, do not completely cover the plants with treated soil. Likewise, do not completely cover plants during subsequent cultivation. Be careful that incorporation equipment does not damage Potato seed pieces or elongating sprouts.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate (in the rate range) in areas receiving less than 20 inches total annual rainfall or irrigation.	

Split Applications Before and After Planting (For Use in Idaho, Oregon and Washington)

On all soils, apply and incorporate this product at the rates shown below as split applications before planting and after planting when Potato plants have fully emerged. Do not apply to soils containing 2% or more organic matter. Follow incorporation directions provided above for application to Potatoes after planting.

BROADCAST APPLICATION RATES PER ACRE	
Time of Application	**This Product (Pts. / Ac.)**
Before Planting	0.75
After Planting	0.75

This Product Tank-mixed with EPTC Herbicide – Post-plant Pre-emergence Treatment (For Use in Kansas, Minnesota, Nebraska, North Dakota, Oklahoma, South Dakota and Texas)

This product may be tank-mixed with EPTC herbicide and applied as a soil incorporated treatment to control additional weeds. Apply after planting, but before crop emergence. In areas where Potatoes are normally dragged off, apply and incorporate up to or immediately following drag off. Use application rates for this product specified in the above table for Potatoes.

Restrictions: Refer to the label for EPTC application rates, additional use directions, precautions and limitations before use. Do not graze for feed forage to livestock from fields treated with this product plus EPTC tank-mixtures.

This Product Tank-mixed with EPTC Herbicide – Pre-plant Treatment (For Use in Idaho, Oregon and Washington)

This product may be tank-mixed with EPTC and applied as a soil incorporated treatment to control additional weeds. Apply before planting and incorporate immediately.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All soil textures	0.75

Restrictions: Do not use this tank-mix both before and after planting in the same season. Do not graze for feed forage to livestock from fields treated with this product plus EPTC tank-mixtures. Refer to the label for EPTC application rates, additional use directions, precautions and limitations before use.

Chemigation

This product may be applied through properly equipped chemigation systems for weed control in Potatoes. Refer to *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label. Do not apply this product through any type of irrigation system unless these directions are carefully followed.

Apply this product to Potatoes in 0.5 to 1 acre inch of overhead sprinkler irrigation after planting, before emergence, or immediately following drag-off or after the Potato plants have fully emerged. Existing weeds must be destroyed by tillage or cultivation prior to application of this product. This product does not control established weeds. Incorporation is not necessary when this product is applied by chemigation.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	Do not apply this product by chemigation to Fine textured soils.

Precautions: If cultivation is required after treatment with this product, avoid completely covering Potato plants with treated soil. Erratic weed control may result if cultivation exposes untreated soil between rows.

RADISH

Apply this product as a pre-plant soil incorporated treatment.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	1.5

RAPESEED (CANOLA) AND CRAMBE

Apply and soil incorporate this product in the Spring before planting, in late Summer or in Fall. See instructions for Fall application under *"APPLICATION TIMING"* section of this label.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	1.5

Precautions: Where applications are made in late Summer or Fall, plant as rotation crops in the season following application only those crops to which this product may be applied as a pre-plant incorporated treatment or crop injury may occur.

Restrictions: Do not apply this product to Rapeseed (Canola) grown in the State of Alaska. Do not graze or harvest Crambe for livestock forage.

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

SAFFLOWERS

Apply and incorporate this product in the Spring before planting or in Fall. See instructions for Fall application under *"APPLICATION TIMING"* section of this label.

BROADCAST APPLICATION RATES PER ACRE		
Soil Texture	**This Product (Pts. / Ac.)**	
	Spring Application	**Fall Application**
Coarse	1	1.5
Medium	1.25 to 1.5	2
Fine	1.5 to 2	2.5
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2.5 pints for soils with 5 to 10% organic matter. Use lower rate range in areas receiving less than 20 inches total annual rainfall and irrigation.		

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

SMALL GRAINS (BARLEY, DURUM AND WHEAT)

SPECIAL PRECAUTIONS FOR USE OF THIS PRODUCT ON SMALL GRAINS

Carefully follow directions for use of this product on small grains to minimize potential crop stress. Under certain conditions, delayed crop emergence and/or stand reduction may occur when this product is applied to Barley, Durum or Wheat. The combined effect of certain cultural practices and unfavorable soil or environmental conditions may cause excessive crop seedling stress resulting in retarded crop growth, stand reduction and possible reduced yield. **For best**

results, observe the following cultural practices or precautions: Use tillage methods that provide a uniformly firm seedbed and time tillage operations to conserve moisture. Irrigate prior to planting or after germination and emergence. Moisture received between planting and emergence may cause crusting, especially on loose, friable seedbeds. Do not exceed labeled application rates for this product. This is particularly important on *Coarse textured* or low organic matter soils.

Carefully follow incorporation directions. When applying pre-plant incorporated treatments, operate equipment at recommended depth and speed to place this product into the upper 1 to 1.5 inches of soil. If applied after planting, set equipment so as not to disturb planted seed. Set drills to place seed at a depth specified in use directions. A planting depth greater than 2.5 inches for Spring wheat or Durum will result in increased seedling stress and decreased emergence. Use only high quality seed where this product is to be applied (avoid use of small seed with low starch reserves). If seed treatments are used, apply at the correct rate and uniformly across all seeds. Misapplications may result in reduced germination and/or seedling vigor. Avoid use of seed varieties known to have poor seedling (emergence) vigor. Do not Fall apply this product in combination with any other pre-plant incorporated herbicide.

Soil characteristics and environmental conditions which may contribute to crop seedling stress that may be accentuated by use of this product include:
Soil related: High salinity, eroded knolls/hilltops, loose dry soils, and compaction.
Weather related: Cold and/or wet soils, excessively hot soils, excessive moisture, drought and soil crusting from heavy rainfall.

Note: Do not apply this product on small grains where a dinitroaniline herbicide such as this product or ethalfluralin (e.g., Sonalan®) was applied at a rate greater than 0.5 pound a.i. per acre the previous growing season.

APPLICATION DIRECTIONS FOR SMALL GRAINS

BARLEY (SPRING SEEDED)

Spring Application Pre-plant Incorporated for Foxtail (Pigeongrass) Control (For Use in MN, ND, and SD)
Apply this product as a pre-plant incorporated treatment prior to planting Spring seeded Barley. This product may be applied to ground that has a manageable trash level or has been fallowed or pre-tilled. The first incorporation is required within 24 hours after application. The second incorporation is required prior to planting to destroy emerged weeds and ensure even distribution of this product in the soil surface.

Broadcast Application Rates per Acre: Apply at a rate of 1 pint per acre for all soil textures regardless of organic matter content.

Incorporation: Incorporation tools include the chisel plow (first incorporation pass only), tandem disc and field cultivator. Refer to *"INCORPORATION EQUIPMENT"* section of this label for details on operation of incorporation equipment.

Planting Directions: Barley should be seeded approximately 1.5 inches deep.

Precautions: Carefully read and follow *"SPECIAL PRECAUTIONS FOR USE OF THIS PRODUCT IN SMALL GRAINS"* before application of this product. While use of this weed control practice may result in a stand reduction, slight stand reductions do not normally affect yield.

Spring Application, Pre-plant Incorporated for Foxtail (Pigeongrass) Control in Barley Used as a Cover Crop or in the Conservation Reserve Program
Apply this product as a pre-plant incorporated treatment prior to planting Spring seeded Barley on land enrolled in Acreage Conservation Reserve Programs. Follow recommended soil preparation, application and incorporation procedures for this product.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.5
Fine	1.5

Planting Directions: Barley should be seeded approximately 1.5 inches deep.

Precautions: Use of this weed control practice may result in slight stand reduction.

Restrictions: Follow the most severe grazing restrictions imposed either by the label for this product or by the USDA Acreage Conservation Reserve Program, whichever is longest. Consult the local ASCS office or other State agency to determine the period of USDA grazing restriction.

WINTER WHEAT

Pre-plant Incorporated for Control of Cheatgrass and Other Annual Grasses and Broadleaf Weeds (For Use in ID, OR, and WA)

Apply this product as a pre-plant incorporated treatment for control of Annual bluegrass, Annual ryegrass, Downy brome (Cheatgrass), Fiddleneck (Tarweed), Henbit and Pacific meadow foxtail (Blackgrass).

The growth, development and yield of Winter wheat will not be adversely affected, provided the seed is placed below the zone of soil treated with this product. This product may be applied for up to 3 weeks before planting.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5
Medium	1.5
Fine	2

Incorporation Directions: Incorporate this product with a flexible tine-tooth harrow (Flextine or Melroe) set to cut 1 to 2 inches deep and operate at 3 to 6 mph. Incorporate once within 24 hours after application and a second time in a different direction from the first prior to planting. Do not till the soil with a disc after this product has been incorporated with a flexible tine harrow.

Planting Directions: Use only a deep furrow or semi-deep furrow drill that will place the seed below the zone of soil treated with this product.

Precautions: Carefully read and follow *"SPECIAL PRECAUTIONS FOR USE OF THIS PRODUCT IN SMALL GRAINS"* before application of this product. Wheat planted in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development.

Post-plant Incorporated Treatment

Apply and incorporate this product after planting, but before emergence to control the following weeds susceptible to this product in Winter wheat. Annual bluegrass, Annual ryegrass, Downy brome (Cheatgrass), Fiddle neck (Tarweed), Henbit, and Pacific meadow foxtail (Blackgrass).

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.0 to 1.5
Medium	1.5

Planting Directions: Plant Wheat 2 to 3 inches deep in a well-tilled seedbed. Do not use a deep or semi-deep furrow drill.

Incorporation Directions: Incorporate this product using 2 passes with a flex-tine or spike-tooth harrow operated at least 5 mph. The second incorporation pass should be in a different direction than the first. Set equipment to cut 1 to 1.5 inches deep and avoid disturbing seed. Application and first incorporation should be done in the same operation if possible. Both incorporations must be done within 24 hours.

Precautions: Carefully read and follow *"SPECIAL PRECAUTIONS FOR USE OF THIS PRODUCT IN SMALL GRAINS"* before application of this product. Wheat seed in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development. If less than 20 inches of rainfall plus irrigation was received between planting and harvest, refer to *"ROTATION CROP RESTRICTIONS"* section of this label before planting Sorghum or Oats.

Fallow Soil Application Prior to Planting (For Use in ID, OR, and WA)
This product may be applied and shallowly incorporated into fallow soil up to 4 months before planting Wheat to control Cheatgrass and certain annual grasses and broadleaf weeds. Apply this product any time from May to September prior to Fall planting of Winter wheat. Wheat growth, development and yield will not be adversely affected so long as the seed is placed below the zone of soil treated with this product.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5
Medium	1.5
Fine	2

Incorporation Directions: Incorporate this product with a flexible tine-tooth harrow (Flextine or Melroe) set to cut 1 to 2 inches deep and operate at 3 to 6 mph. Incorporate once within 24 hours after application and a second time in a different direction from the first prior to planting. Do not till the soil with a disc after this product has been incorporated with a flexible tine harrow.

Planting Directions: Use only a deep furrow or semi-deep furrow drill that will place the seed below the zone of soil treated with this product.

Precautions: Carefully read and follow *"SPECIAL PRECAUTIONS FOR USE OF THIS PRODUCT IN SMALL GRAINS"* before application of this product. Wheat planted in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development.

WHEAT, DURUM AND BARLEY, SPRING SEEDED – FALL APPLIED

Pre-plant Soil Incorporated for Foxtail (Pigeongrass) Control (For Use In MN, ND, and SD)
Apply this product in the Fall for Foxtail (Pigeongrass) control during the following growing season. Incorporate 1 time within 24 hours. Incorporate a second time before planting to destroy existing weeds and insure a uniform distribution of this product in treated soil. This product may be applied to ground that has a manageable level of crop residue, or has been fallowed or pre-tilled.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse and Medium	1
Fine	1.5

Incorporation: Incorporation tools include the chisel plow (first incorporation pass only), tandem disc, and field cultivator. Refer to *"INCORPORATION EQUIPMENT"* in the *"PRODUCT INFORMATION"* section of this label for details on operation of incorporation equipment.

Planting Directions: See *"INCORPORATION EQUIPMENT"* in the *"PRODUCT INFORMATION"* section of this label to place seed approximately 1.5 inches deep.

Precautions: Carefully read and follow *"SPECIAL PRECAUTIONS FOR USE OF THIS PRODUCT IN SMALL GRAINS"* before application of this product.
While use of this control practice may result in a stand reduction, slight stand reductions do not normally affect yield.

SPRING WHEAT, DURUM AND BARLEY

Post-plant Incorporated for Foxtail (Pigeongrass) Control
Apply and incorporate this product after planting, but before emergence to control Foxtail (Pigeongrass) in Spring Wheat, Durum, and Barley. This product may be tank-mixed with triallate (e.g., Far-Go®) to control Wild oats. Refer to the label for triallate (e.g., Far-Go) for application rates, additional use directions, precautions and limitations before use.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1
Fine	1.5

Planting Directions: Plant Wheat 2 to 3 inches deep in a well-tilled seedbed.

Incorporation Directions: Incorporate this product using 2 passes with a flextine or diamond harrow operated at least 5 mph. The second incorporation pass should be in a different direction than the first. Set equipment to cut 1 to 1.5 inches deep and avoid disturbing seed. Application and first incorporation should be done in the same operation if possible. Both incorporations must be done within 24 hours.

Precautions: Carefully read and follow *"SPECIAL PRECAUTIONS FOR USE OF THIS PRODUCT IN SMALL GRAINS"* before application of this product. Wheat seed in direct contact with treated soil may suffer crop injury in the form of delayed emergence and development.

SOYBEANS

This Product Alone

Apply this product and incorporate in the Spring before planting. This product may also be applied in the Fall. See instructions for Fall application under *"APPLICATION TIMING"* section of this label.

BROADCAST APPLICATION RATES PER ACRE		
Soil Texture	**Spring Application (Pts. / Ac.)**	**Fall Application* (Pts. / Ac.)**
Coarse**	1	2
Medium**	1.5	2
Fine**	2	2.5

***Fall Application Rates for States including AL, AR, Northern FL, GA, LA, MS, Southeastern MO (Bootheel), NC, OK, SC, TN and TX: For Soybeans grown in States other than those listed above, Fall apply this product at broadcast rates specified for Spring pre-plant incorporated treatment.

**Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soil with 2 to 5% organic matter. Use 2 to 2.5 pints for soils with 5 to 10% organic matter.

Precautions: Soybeans should be planted after early season adverse weather conditions have passed, especially when using higher rate programs. Cool, wet weather early in the growth cycle causes additional stress on the Soybean plant which may result in reduced stand, delayed maturity and reduced yield.

Tank-mix Overlay and Post-emergence Directions

For broader spectrum weed control, other products registered for use in Soybeans may be applied in tank-mix combination with this product or as a sequential treatment following application of this product. When tank-mixing, use the labeled rate of this product. Follow the label *"DIRECTIONS FOR USE"* of each tank-mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank-mixing in the *"MIXING INSTRUCTIONS"* section of this label.

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

SPECIAL USE PROGRAMS

Chemigation

This product may be applied through properly equipped chemigation systems for weed control in Soybeans. Refer to *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label for use directions for chemigation. Do not apply this product through any irrigation system unless these directions are carefully followed. Apply this product in sprinkler irrigation equal to 0.5 to 1 inch of water. Planting and application should occur as soon as possible after the last tillage operation. This product must be applied within 2 days after planting and prior to crop emergence. This product does not control established weeds. Soil incorporation is not required when this product is applied through chemigation systems.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5 to 2
Medium	1.5 to 2
Fine	2 to 2.5
Use 2 pints for soil with 2 to 5% organic matter. Use 2 to 2.5 pints for soil with 5 to 10% organic matter.	

Cultivation: Soil treated by chemigation with this product may be shallow cultivated without reducing weed control activity.

Weed Control Under Reduced or Conservation Tillage

This product can be applied either in the Fall or in the Spring as a pre-plant incorporated treatment for weed control in Soybeans grown under reduced or conservation tillage conditions. Make only 1 application per crop cycle.
Apply to tilled land or standing or chopped stubble from the previous season's crop. The first incorporation of this product must occur within 24 hours. For the first incorporation, a tandem disc or combination tool that can thoroughly mix this product into the top 2 to 3 inches of the final seedbed while leaving the desired amount of plant residue on the soil surface is recommended. For Fall or Spring application, the second incorporation can occur anytime prior to planting or at-planting with tillage equipment that provides uniform soil mixing used in conjunction with no-till planters.

Application With Dry Bulk Fertilizers

Dry bulk fertilizer impregnated or coated with this product may be applied as a pre-plant incorporated treatment. See instructions for *"Application With Dry Bulk Fertilizer"* in the *"APPLICATION METHODS"* section of this label. Under reduced or conservation tillage conditions, uniformly applied dry bulk fertilizers impregnated with this product provide weed and grass control equal to or better than this product applied with dry bulk fertilizer. For best results with Spring applications, incorporate once within 24 hours after application and a second time at least 5 days later.

APPLICATION RATES PER ACRE		
Soil Texture	**This Product (Pts. / Ac.)***	
	Spring Applied	**Fall Applied**
Coarse	1 to 1.5	1.5 to 2
Medium	1.5 to 2	2 to 2.5
Fine	2 to 2.5	2.5 to 3
*Use the higher rate in the rate range where higher crop residues are present or where dense weed populations are anticipated.		

Precautions

To be effective, this product must be mixed thoroughly in the top 2 to 3 inches of soil in the final seedbed. Weed control may be poor or erratic where soil conditions or heavy crop residues do not permit thorough soil mixing.

Fall Panicum Control

Apply this product as a pre-plant incorporated treatment at a broadcast rate of 2 pints per acre on *Coarse* and *Medium soils*.

Pigweed and Seedling Johnsongrass Control

Apply this product as a pre-plant incorporated treatment.

Broadcast Application Rates Per Acre: In AL, AR, FL, GA, KS, LA, MS, MO, NE, NC, OK, SC, TN and Southern VA, apply this product at the following broadcast rates*:

APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1 to 1.5
Medium	1.5 to 2
Fine	2 to 2.5

*Exception: In Louisiana, apply 3 pints per acre on *Fine soils*.

Additional Weed and Grass Control (Gulf Coast Counties of TX)

Apply this product as a pre-plant incorporated treatment up to 2 weeks before planting.

Broadcast Application Rates per Acre: For Soybeans grown in Brazonia, Calhoun, Chambers, Fort Bend, Galveston, Harris, Jackson, Jefferson, Liberty, Matagorda, Orange, Victoria, Waller and Wharton counties of the TX Gulf Coast, apply this product at the following broadcast rates:

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5
Medium	2
Fine	3

Itchgrass (Raoulgrass) Suppression

Apply this product as a pre-plant incorporated treatment or at lay-by.

Lay-by Treatment: Cultivate to remove existing weeds and treat when Soybeans are well established (10 inches tall). Apply as a directed spray to the soil surface and incorporate using a rolling cultivator set to cut 2 to 4 inches deep or sweep-type cultivator with 3 to 5 sweeps per row middle operated 2 to 3 inches deep. Set incorporation equipment to throw treated soil to the row.

BROADCAST APPLICATION RATES PER ACRE (Pts.)		
Soil Texture	**Pre-plant Incorporated**	**Lay-by Application**
Medium	3	1
Fine	3	2

Charcoal Soils in AR, LA, and MS

Newly cleared land often contains high organic matter (5% to 10%) and charcoal from burning debris. Charcoal and organic matter tends to bind this product and reduce weed control activity. Under these conditions, higher rates of this product are necessary for weed control. Increased rates, however, can cause crop injury if charcoal or organic matter is not present to bind some of this product. In the burn row a high level of charcoal is usually present. Consequently, poor weed control may result, even if an increased rate of this product is used. Follow the application and incorporation procedures for this product.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5 to 2.5
Medium	2.5
Fine	3

Red Rice Control in AR, LA, MS, and TX Only

Suppression or partial control of Red rice can be obtained from a 2 year treatment program which consists of a double rate application the first year followed by application in the second year at normal rates indicated for soil texture, organic matter or charcoal content. Apply and incorporate this product in the Spring before planting. Follow recommended soil preparation and incorporation procedures for this product.

BROADCAST APPLICATION RATES PER ACRE		
Soil Texture	**Application Year 1 (Pts. / Ac.)**	**Application Year 2 (Pts. / Ac.)**
Coarse	2	1
Medium	3	1.5
Fine	4	2
Coarse soils with 2 to 5% organic matter	3	1.5
Soils with 5 to 10% organic matter	4	2 to 2.5

In AR, LA, and MS: If a combination of high soil organic matter (5% to 10%) and charcoal are present, apply this product at the following broadcast rates:

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1.5 to 2.5
Medium	2.5
Fine	3

For more information on charcoal soils, see discussion in preceding section.

Restrictions (Crop Rotation): The directions for Red rice control in Soybeans is a 2 year program. In the first year following a maximum rate application, plant only Soybeans. During the second year, after applying this product at the normal rate indicated for soil texture and charcoal level, plant only those crops for which this product is registered as a pre-plant treatment or crop injury may result. Rice may be planted during the third year following application of normal use rates in year two.

Rhizome Johnsongrass Control In the Eastern U.S. and the State of TX

Rhizome johnsongrass control with this product requires a maximum rate application for two consecutive years. Commercially acceptable control cannot be obtained with only one year of maximum rate use of this product. Carefully follow the special use directions which follow.

Soil Preparation: Satisfactory results are dependent upon proper soil preparation prior to application. Chisel plow to bring rhizomes to the soil surface. Disc twice before application to chop rhizomes into small (2 to 3 inch) pieces and destroy any recently emerged Johnsongrass plants.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	2
Medium	3
Fine	4
Use 3 pints for Coarse soils with 2 to 5% organic matter. Use 4 pints for soils with 5 to 10% organic matter.	

Spring Application: Apply this product any time before planting in the Spring for two consecutive years.

Fall Application: Apply this product after October 15 for two consecutive years.

Split Application: Apply this product at the broadcast rates indicated in the following table both Spring and Fall for 2 consecutive years.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product**
	FALL + SPRING (Pts. / Ac.)
Coarse	1 + 1
Medium	1.5 + 1.5
Fine	2 + 2
Coarse soils with 2 to 5% organic matter	1.5 + 1.5
Soils with 5 to 10% organic matter	2 + 2

Incorporation: Deep incorporation with a tandem disc is essential for good results. Set disc to operate 4 to 6 inches deep and operate at 4 to 6 mph. Two incorporation passes are necessary and the second should be in a different direction than the first.

Cultivation: Some Johnsongrass plants will not be controlled. Timely cultivation during the crop season is necessary to remove escaped plants and maintain commercially acceptable control.

Precaution: In the season following a double rate treatment, plant only rice and those crops to which this product can be applied as a pre-plant or crop injury may result.

Rhizome Johnsongrass Control with This Product Tank-mixed With Metribuzin (e.g., Sencor®, Lexone®)

Rhizome Johnsongrass control with this product plus metribuzin requires application for two consecutive years. Apply this product plus metribuzin as a pre-plant incorporated treatment up to two weeks before planting. This tank-mix controls weeds susceptible to this product plus additional weeds listed on the label for metribuzin.

Application Rates: See rates listed above for *"Rhizome Johnsongrass Control in The Eastern U.S. and the State of TX"*. Use application rates for Soybeans in the label for metribuzin.

Restrictions: Refer to the label for metribuzin for application rates, additional use directions, precautions and limitations prior to applying this product plus metribuzin tank-mix. Carefully follow all use precautions and restrictions on the labels for metribuzin.

Wild Cane (Shattercane) Control

Follow the soil preparation and application procedures for this product. Wild cane (Shattercane) can germinate throughout the growing season and from greater soil depth than most other weed seeds. Commercially acceptable control of Wild cane can be obtained by using increased rates of this product.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	2
Fine	2.5

Incorporation: Deep incorporation with a tandem disc is essential for good Wild cane control. Incorporate this product thoroughly with a disc set to cut 4 to 6 inches deep and operate at 4 to 6 mph. Two incorporation passes are necessary with the second in a different direction than the first.

Cultivation: Cultivation during the growing season will improve Shattercane control.

SUGAR BEETS

This Product Alone

Apply this product as an over-the-top spray and incorporate. Apply from the time the first true leaves have formed until plants are 6 inches tall.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.25 to 1.5

Incorporation: Set incorporation equipment to move treated soil around the plants in the row. Avoid damage to the Sugar beet taproot from incorporation equipment.

Precaution: Exposed Beet roots should be covered with soil before application of this product to reduce the possibility of girdling.

Incorporation with a Tine-Tooth Harrow (For Use in CA, CO, ID, NE, OR, TX, UT, WA, and WY)

A tine-tooth harrow (Flextine or Melroe) can be used to incorporate this product in Sugar beets. Incorporation with tine-tooth harrow requires 2 passes in opposite directions over the same set of rows. Set the harrow to cut 1 to 2 inches deep and operate at 3 to 6 mph. Set incorporation equipment carefully to avoid damage to Sugar beet tap root. Use application procedures and broadcast application rates specified in preceding section.

Tank-mix Combinations

For broader spectrum weed control, other products registered for use in Sugar beets may be applied in tank-mix combination with the product or as a sequential treatment following application of this product. When tank-mixing, use the labeled rate of this product. Follow the label *"DIRECTIONS FOR USE"* of each tank-mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank-mixing in the "*MIXING INSTRUCTIONS*" section of this label.

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

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

SUGARCANE

This Product Alone

Apply and incorporate this product twice a year. Make the first application of this product in the Fall on firmly packed beds immediately after the seed pieces are planted. Make the second application of this product in the Spring before or shortly after the cane emerges. Loosen rain-packed beds 2 to 3 inches deep before the Spring application. Take care that incorporation equipment does not damage the seed pieces or emerging shoots.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Textures	2 to 4*
*Application rate within rate range may be adjusted according to weed pressure.	

Post-plant Application for Control of Most Annual Grasses, Including Guineagrass (For Use in HI)

Surface apply this product after planting (for plant cane) or after harvesting (for Ratoon cane). For best results in Plant cane, the soil surface should be smooth and finely tilled. Apply this product as soon as possible after tillage and planting before germination and emergence of grass weeds. For optimum efficacy in ratoon cane, minimize surface residue from previous crop before applying. Apply this product just before anticipated rainfall in non-irrigated and furrow-irrigated Sugarcane. Irrigate as soon as possible after applying in drip-irrigated or sprinkler-irrigated Sugarcane to activate this product.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Textures	6 to 8

Repeat Applications: Subsequent germination of grass weeds may occur prior to the development of a full dense canopy of Sugarcane. If this occurs, additional grass weed establishment is strongly suppressed. One or two additional applications of this product can be applied to maintain weed control during the early crop development period. For repeat applications, direct the spray to the soil surface to minimize interception of the herbicide crop.

Restriction: Do not apply this product as a post-plant surface applied treatment within 180 days of harvest.

Application Up to Lay-by for Plant Cane or Ratoon Cane (For Use in LA and TX)

Apply and incorporate this product in the Spring from shortly before or after cane emergence until lay-by. Apply after beds have been shaved or false shaved. Loosen rain-packed beds 2 to 3 inches deep before application. Avoid incorporation equipment damage to seed pieces or emerging shoots. Incorporate with a rolling cultivator or bed chopper for all soil textures. Set rolling cultivator to cut 2 to 4 inches deep and operate at 6 to 8 mph. Set bed chopper to cut 3 to 4 inches deep and operate 4 to 6 mph. Two incorporation passes are necessary.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Textures	2 to 4*
*Application rate within rate range may be adjusted according to weed pressure.	

Itchgrass (Raoulgrass) Control (For Use in LA)

Apply and incorporate this product on plant or ratoon cane. Follow use directions in preceding section for lay-by application.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Textures	2 to 4

[Optional] Chemigation

For application by irrigation system, apply specified dosage of this product described in the above tables. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

SUNFLOWERS

This Product Alone

Apply and incorporate this product in the Spring before planting or in the Fall. See instructions for Fall application under *"APPLICATION TIMING"* section of this label.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse a nd Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Tank-mix Combinations

For broader spectrum weed control, other products registered for use in Sunflowers may be applied in tank-mix combination with this product or as a sequential treatment following application of this product. When tank-mixing, use the labeled rate of this product. Follow the label *"DIRECTIONS FOR USE"* of each tank-mix partner for applicable use instructions including application rate, application timing, weeds controlled, and specific precautions and restrictions of product use. See detailed information for tank-mixing in the "mixing instructions" section of this label.

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

[Optional] Chemigation
For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label. For tank-mixes containing this product, follow label directions, restrictions and precautions for both products concerning chemigation. Do not use tank-mixes for chemigation when not permitted on either label.]

TOMATOES

Apply this product to direct-seeded Tomatoes as a directed spray between rows and beneath plants and incorporate at the time of blocking or thinning. For transplant Tomatoes, apply and incorporate before transplanting or apply post-plant as a directed spray to the soil between rows and beneath plants and incorporate.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 pints for Coarse and Medium soils with 2 to 5% organic matter. Use 2 pints for Fine soils with 2 to 5% organic matter. Use 2 pints for soils with 5 to 10% organic matter. Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

[Optional] Chemigation
For application by irrigation system, apply specified dosage of this product described in the above table. Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

TREES AND VINE CROPS (Citrus, Fruit and Nut Crops, and Vineyards)

Application to New Plantings of Citrus, Fruit and Nut Crops
New plantings of Almond, Apricot, Grapefruit, Lemon, Nectarine, Orange, Peach, Pecan, Plum, Prune, Tangelo, Tangerine, and Walnut trees, apply and incorporate this product before transplanting.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
Use 1.5 to 2 pints in all soils with 2 to 5% organic matter. Use 2 pints in all soils with 5 to 10% organic matter. Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Application to New Plantings of Vineyards

For new plantings of vineyards, apply and incorporate this product before transplanting.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1 to 1.5
Medium	1.5 to 3
Fine	3 to 4
Use 4 pints for soils with 2 to 5% organic matter. Use lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Note: Do not use more than 2 pints per acre on mist-propagated Grape rootings.

Application to Established Non-bearing and Bearing Citrus, Fruit and Nut Crops and Vineyards

This product may be applied in established non-bearing and bearing vineyards and plantings of Almond, Apricot, Grapefruit, Lemon, Nectarine, Orange, Peach, Pecan, Plum, Prune, Tangelo, Tangerine, and Walnut trees. In established plantings, apply this product as a directed spray to the soil and use incorporation methods not injurious to the crop. Do not apply to vineyards within 60 days of harvest.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Soil Textures	2 to 4
Application rate within the rate range may be adjusted according to weed pressure.	

Application to Non-bearing Citrus Trees Through Irrigation Water Rings

Apply to non-bearing citrus trees through irrigation water rings to provide pre-emergence weed control. Mix at a rate of 0.75 pint (12 fluid ounces) of this product per 500 gallons of water. Agitate until uniformly dispersed in tank. Apply 10 gallons of the mixture per 4-foot diameter water ring per tree. Apply this product at the second or third watering and should not be applied in combination with any other pesticide.

Special Use Programs

Rhizome Johnsongrass Control — Special Two-year Use Program

This product may be applied for 2 consecutive years in a special use program to control Rhizome Johnsongrass in established vineyards and plantings of Almond, Apricot, Grapefruit, Lemon, Nectarine, Orange, Peach, Pecan, Tangelo, Tangerine, and Walnut trees. Do not apply to vineyards within 60 days of harvest.

Soil Preparation: Work the soil thoroughly to move rhizomes near the soil surface and cut them into smaller pieces.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Soil Textures	4*
*Apply this rate for 2 consecutive years.	

Incorporation: Incorporate this product thoroughly with a disc set to cut 4 to 6 inches deep and operate 4 to 6 mph. Two incorporation passes are necessary, with a second pass in a different direction from the first.

Cultivation: Some Johnsongrass plants will escape. Timely cultivations are necessary to obtain commercially acceptable control. Commercially acceptable control cannot be obtained with only a single year use of this product.

Precautions: On new plantings, crop injury may result if this product is used at the rate of 4 pints per acre.

Restrictions: Do not interplant orchards or vineyards with other crops. If treated vineyards and orchards are diverted to other crop uses, then in the next cropping season, plant only those crops for which this product has been registered as a pre-plant incorporated treatment.

Bindweed Control in CA

This product can be applied using a specially equipped spray blade for the control of Field bindweed in vineyards and in plantings of Almond, Apricot, Grapefruit, Lemon, Nectarine, Orange, Peach, Pecan, Tangelo, Tangerine, and Walnut trees.

Soil Preparation: Destroy existing weeds with soil tillage before applying this product. Thorough tillage is necessary to prevent trash from interfering with operation of the spray blade.

Equipment: Application requires a spray blade capable of operation at 4 to 6 inches below the soil surface. The blade should be equipped with nozzles located under the blade and directed so as to allow spray to be trapped in a thin layer as the blade is pulled through the soil. Use a nozzle spacing sufficient to ensure application of a uniform horizontal layer.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Soil Textures	4

Application: Apply this product in 40 to 80 gallons of water per acre. Operate blade at a depth of 4 to 6 inches.

Precautions: Some soils may develop cracks as they dry after rainfall or irrigation. Field bindweed may emerge if the cracks extend through the layer of this product. Prevent or eliminate cracks by shallow discing or other tillage. Avoid deep tillage which disturbs the sub-surface layer. Cultivation or tillage also aids the control of germinating seeds.

[Optional] Chemigation Application on Stone Fruit and Nut Crops and Vineyards

For application by irrigation system, apply specified dosage of this product per acre as described in the above sections for use on *"TREES AND VINE CROPS".* Follow all directions given under *"Chemigation Directions"* in the *"APPLICATION METHODS"* section of this label.]

TREES GROWN FOR PULP (ASPEN, COTTONWOOD, POPLAR)

Apply as a soil incorporated treatment to control weeds susceptible to this product in new and established plantings of trees grown for pulp.

Application Before Planting

Apply and incorporate this product before planting.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
Coarse	1
Medium	1.25 to 1.5
Fine	1.5 to 2
All soils with 2 to 5% organic matter, use 1.5 to 2 pints per acre. All soils with 5 to 10% organic matter, use 2 pints per acre. Use the lower rate in rate range in areas receiving less than 20 inches total annual rainfall and irrigation.	

Application to Established Plantings

In established plantings, apply and incorporate this product prior to periods of weed germination or immediately after existing weeds are controlled by tillage or herbicide treatment. Apply as a directed spray and use incorporation methods not injurious to crop.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Soil Textures	2 to 4
Application rate within the rate range may be adjusted according to weed pressure.	

Johnsongrass Suppression in Established Plantings

Proper soil preparation before application is necessary for satisfactory results. Use a chisel plow or similar implement to bring rhizomes to the soil surface. Then work the soil twice using a tandem disc to cut rhizomes into small (2 to 3 inch) pieces and to destroy emerged Johnsongrass.

BROADCAST APPLICATION RATES PER ACRE	
Soil Texture	**This Product (Pts. / Ac.)**
All Soil Textures	4

Incorporation: Incorporate twice with tandem disc set to cut 4 to 6 inches deep and operate at 4 to 6 mph.
Cultivation: Some Johnsongrass plants will escape. Timely cultivation with tillage implements or spot spraying with effective post-emergence herbicides will improve the level of Johnsongrass control.

UNDER PAVED SURFACES

Use Instructions and Site Preparation

Use this product only where the area to be treated has been prepared according to good construction practices. If rhizomes, stolons, tubers or other vegetative plant parts are present in the site, they should be removed (by scalping with a grader blade to a depth sufficient to insure their complete removal.

Apply this product only when final grade is established or after additions of base rock. Do not move soils following application of this product. Do not apply this product to areas where asphalt is to be laid directly on top of soil. Paving should follow applications of this product as soon as possible.

Large Areas: Apply this product in sufficient water to ensure thorough wetting of the soil surface or penetration of the spray solution through the base rock layer. A minimum of 150 gallons per acre is recommended. Apply with any sprayer that will apply the spray uniformly. Add the specified amount of this product to clean water in the spray tank during the filling operation. Agitate before spraying.

Small Areas: For treating small areas, a tank-type hand sprayer or sprinkling can may be used. Before application, determine the amount of water and this product necessary to uniformly cover the area to be treated. Shake or stir the spray solution prior to application.

Application Rates

This Product	
Rate/1000 Sq. ft. (Pts.)	**Rate /Ac. (Gals.)**
0.5 to 0.75 (9 to12 fl. ozs.)	3 to 4

Application Directions

Beginning with a clean spray tank, fill the sprayer one-half full with clean water. Add the labeled rate of this product, close the sprayer and shake well to mix. Finish filling sprayer and shake occasionally to keep this product mixed in the tank. Apply this product in 1 to 5 gallons of water per 1000 square feet on a broadcast basis. Spray uniformly over the top of the soil surface to ensure satisfactory weed control.

Crop residues or existing weeds can interfere with the mixing of this product into the soil. A manageable level of such residues allows this product to be uniformly mixed into the top 2 to 3 inches of soil. If the level of the crop residue is such that this cannot be done, till the soil prior to application.

Soil Texture Guide

The amount of this product applied varies with the soil texture to be treated: A fine textured soil requires more this product than a coarse soil. Choose the proper rate for each application based upon the following soil texture group and specific crop directions. Do not exceed specified rates.

Soil Texture	Soil Classification
Coarse (light)	Sands, Loamy sands, Sandy loams
Medium	Silt, Loam
Fine (heavy)	Clay loams, Silty clay loams, Clays, Silty clays

Rate Conversion Chart

This Product	
Rate per 1000 sq. ft. (Teaspoon*)	**Rate Per Acre (Pint)**
2 1/4	1
3 1/3	1.5
4 1/2	2
1 tsp. = 5 mL; 6 tsps. = 1 fl. oz.	

Small Sprayer Calibration Technique

Small sprayer calibration can be 'achieved by following these five steps:

1. Fill the sprayer full of clean water.
2. Spray over the area to be treated.
3. When the sprayer is empty, measure the area treated to determine the number of square feet per sprayer load.
4. After calculating the number of square feet per sprayer load, calculate the amount of this product needed to treat that size area.
5. Refer to the mixing directions on the product label for this product.

Incorporation Directions

Thoroughly mix this product into the top 2 to 3 inches of the final seedbed (when the garden is ready for planting) or erratic weed control and/or crop injury may result. Equipment such as a rototiller or rake should be used to mix this product to the desired 2 to 3 inch depth.

The machinery used for incorporation should break up large clods and mix this product thoroughly with the soil. The more thoroughly this product is mixed within the soil, the more consistent the weed control.

Pre-plant Incorporation: This product must be mixed into the top 2 to 3 inches of the final seedbed within 24 hours after application.

Post-plant Incorporation: Follow specific crop incorporation directions after planting.

Cultivation After Planting

Soil treated with this product may be shallow cultivated without reducing the weed control activity of this product. Do not cultivate deeper than the treated soil since this may bring untreated soil to the surface and poor weed control may result.

Crop Directions

These directions are given as broadcast rates of this product per 1000 square feet. Apply any time after January 1 when the soil can be worked and is suitable for good incorporation. Do not use this product on soils containing more than 10% organic matter. Do not use this product in areas to be planted with Sweet corn or direct seed Cucurbits.

For the following crops, use the rates listed below. Apply and incorporate this product before planting, at planting or immediately after planting unless otherwise indicated.

BROADCAST RATE PER 1000 SQ. FT.	
Soil Texture	**This Product (Teaspoon*)**
Coarse	2.25
Medium	3.3
Fine	4.5
1 tsp. = 5 mL; 6 tsps. = 1 fl. oz.	

- **Asparagus (Established):** Follow specified soil preparation, application and incorporation procedures for this product. This product can be applied to established asparagus as a single application. Apply this product to asparagus after ferns are removed but before spear emergence.

- **Carrots**

- **Celery (Direct Seeded and Transplant)**

- **Cole Crops (Transplant) (Broccoli, Brussels Sprout, Cabbage and Cauliflower):** Apply and incorporate prior to transplanting only.

- **Cucurbits - (Post-plant Emerged) (Cantaloupe, Cucumber and Watermelon):** Apply this product as a direct spray to the soil between the rows and beneath the plants which are in the 3 to 4 true leaf stage. After applying to the soil, incorporate this product to mix the chemical to the 2 to 3 inch desired depth. Optimum weed control will be achieved by moving a portion of the treated soil around the base of the established plants.

- **Okra**

- **Pepper (Transplant):** Apply and incorporate prior to transplanting only.

- **Potato (All States Except ME):** Apply and incorporate this product after planting, before emergence or immediately following drag-off or after the potato plants have fully emerged. Mix this product into the soil so a uniform layer of treated soil covers the bed. Concentrated areas of chemical in the bed may retard potato emergence and cause stem brittleness. If potato plants are already emerged when cultivating, do not totally cover foliage with treated soil. Do not damage potato seed pieces or elongating sprouts with incorporation equipment.

- **Southern Peas (Before Planting Only)**

- **Tomatoes (Transplant):** Apply and incorporate prior to transplanting only.

Beans (Lima Bean, Snap Bean); Cole Crops (Direct Seeded) (Broccoli, Brussels Sprout, Cabbage, Cauliflower); Greens (Turnip Greens, Collard, Kale, Mustard Greens); Green Peas

Apply and incorporate this product before planting.

BROADCAST RATE PER 1000 SQ. FT.	
Soil Texture	**This Product (Teaspoon*)**
Coarse	2.25
Medium	2.25
Fine	3.3
1 tsp. = 5 mL; 6 tsps. = 1 fl. oz.	

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Store in original container only. Avoid freezing. Store above 40ºF. If frozen, poor weed control may result. Do not store near heat or flame. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

PESTICIDE DISPOSAL: To avoid waste, use all materials in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often, such programs are run by State or local governments or by industry).

CONTAINER HANDLING:

Nonrefillable Container (rigid material; less than 5 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Nonrefillable Container (rigid material; 5 gallons up to < 250 gallons): Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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

Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

WARRANTY—CONDITIONS OF SALE

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