# 19713-617



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

12 05 2011

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

DEC 0 5 2011

Mr. Scott Pace Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327

Subject:

Drexel Quik-Quat EPA Registration Number 19713-617 Application (by email) dated December 1, 2011 Removal of Alfalfa Desiccation to facilitate harvest section and revision of REIs per Agency letter dated July 21, 2011

Dear Mr. Pace,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act as amended is acceptable. Amended labeling will supercede all previously accepted ones. A stamped copy of labeling is enclosed for your records. Submit one (1) copy of final printed labeling before you release the product for shipment.

If you have any questions, please contact Hope Johnson at 703-305-5410.

Sincerely,

Kable Bo Davis Product Manager 25 Herbicide Branch Registration Division (7505P)

# **RESTRICTED USE PESTICIDE**

Due to acute toxicity. For retail sale to and use only by certified applicators or persons under their direct supervision and only for those uses covered by the certified applicator's certification.



# QUIK-QUAT

Defoliant and desiccant herbicide for the control of weeds and grasses and as a harvest aid.

NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS. IF SWALLOWED, TAKE IMMEDIATE ACTION AS PRESCRIBED IN FIRST AID. SYMPTOMS ARE PROLONGED AND PAINFUL. DO NOT USE OR STORE IN OR AROUND THE HOME. DO NOT REMOVE CONTENTS EXCEPT FOR IMMEDIATE USE. THE ODOR OF THIS PRODUCT IS FROM THE STENCHING AGENT WHICH HAS BEEN ADDED, NOT FROM PARAQUAT.

Active Ingredient:	
Paraquat dichloride (1,1'-dimethyl-4,4'-bipyridinium dichloride)	43.2%
Other Ingredients:	56.8%
Total:	100.0%
Contains 3.0 pounds paraquat cation per gallon as 4.14 pounds of dichloride salt per gallon.	

Contains emetic and stenching (odor) agent.

# **KEEP OUT OF REACH OF CHILDREN**

**DANGER/PELIGRO** 



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# **POISON/VENENO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

# See First Aid on Page 2

EPA Reg. No. 19713-617 EPA Est. No. 19713-XX-XXX

# Net Content: 2.5 Gals.

617SP-1211\*P

19713-6171

	FIRST AID
	at, a bipyridinium herbicide. Have the product container or label with you when calling a nter or doctor, or going for treatment.
IF SWALLOWED	:
Call a poison c	ontrol center or doctor IMMEDIATELY for treatment advice.
as activated ch	SENTIAL. Immediate medical attention is required. If available, give an absorbent such narcoal, bentonite or Fuller's Earth. p a glass of water if able to swallow.
• Do not induce	vomiting unless told to by a poison control center or doctor.
Do not give any	ything by mouth to an unconscious person.
IF INHALED:	
<ul> <li>Move person t not from the part</li> </ul>	o fresh air. The odor of this product is from the stenching agent, which has been added, araquat.
<ul> <li>If person is not</li> </ul>	breathing, call 911 or an ambulance
	control center or doctor for treatment advice.
IF IN EYES:	
<ul> <li>Hold eye open a</li> </ul>	nd rinse slowly and gently with water for 15 to 20 minutes.
<ul> <li>Remove contact</li> </ul>	lenses, if present, after the first 5 minutes, then continue rinsing eye.
Call a poison co	ntrol center or doctor for treatment advice.
IF ON SKIN OR O	CLOTHING:
Take off contam	inated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes.
Call a poison co	ntrol center or doctor for treatment advice.
	<b>CIAN:</b> Administer either activated charcoal (100 grams for adults or 2 g/kg body weight in 's Earth (15% solution; 1 liter for adults or 15mL/kg body weight in children).
Do not use suppl specialist after in patients with para treatment that is	f gastric lavage without administration of an absorbent has not shown any clinical benefit. emental oxygen. Eye splashes from concentrated material should be treated by an eye itial treatment. With the possibility of late onset corneal ulceration, it is advised that aquat eye injuries are reviewed by an eye specialist the day after first presentation. Use appropriate for chemical burns. Intact skin is an effective barrier to paraquat; however, ed or cut skin or repeated contact with intact skin may result in poisoning.

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For more information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

# HOT LINE NUMBERS: TRANSPORTATION EMERGENCY (CHEMTREC) 800-424-9300

# PRECAUTIONARY STATEMENTS

# Hazards To Humans And Domestic Animals

**DANGER:** May be fatal if swallowed. Fatal if inhaled. Corrosive. Causes irreversible eye damage. Wear protective eyewear. Do not breathe spray mist. Wear a dust/mist respirator. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin. Prolonged or frequently repeated contact may cause allergic reactions in some individuals.

**IMPORTANT:** Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers (other than mixers and loaders) must wear:** Long-sleeved shirt and long pants; Chemical resistant gloves – Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton); Shoes plus socks; Protective eyewear; A NIOSH-approved particulate filtering respirator equipped with N, R, or P, class filter media. The respirator should have a NIOSH approval number prefix TC-84-A.

#### Mixers and loaders must wear:

Long-sleeved shirt and long pants; Chemical resistant gloves - Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride (PVC) or viton); Shoes plus socks; Chemical resistant apron; Face shield; NIOSH approved particulate filtering respirator equipped with N, R, P, or class filter media. The respirator should have a NIOSH approval number prefix TC-84-A.

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 before eating, drinking, and 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 product is toxic to wildlife. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

Paraquat dichloride is toxic to nontarget crops and plants if off-target movement occurs because it desiccates all green plant tissue. Extreme care must be taken to ensure that off-target drift is minimized to the greatest extent possible. Refer to the local state laws, regulations, guidelines, and spray drift information contained in the *Directions For Use* section of this label for proper application to avoid off-target movement. Do not apply under conditions involving possible drift to food, forage, or other plantings that might be damaged or the crops thereof rendered unfit for sale, use, or consumption. Do not apply when weather conditions favor drift from treated areas. To avoid drift, do not make aerial application during periods of thermal inversion.

# PHYSICAL AND CHEMICAL HAZARDS

This product is mildly corrosive to aluminum and produces hydrogen gas which may form a highly combustible gas mixture. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings. The product is compatible with high density polyethylene and rubber-lined steel containers.

# DIRECTIONS FOR USE

# RESTRICTED USE PESTICIDE

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

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

# AGRICULTURAL USE REQUIREMENTS

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

For chemical fallow and early postemergence broadcast in peanuts and dormant season applications, and "between cutting" applications in alfalfa: Do not enter or allow worker entry into treated areas during the REI of 12 hours.

For harvest aid and desiccation applications; preplant or preemergence (broadcast or banded) and postemergence directed spray applications: Do not enter or allow worker entry into treated areas during the REI of 24 hours.

PPE required for early entry to treated areas that is permitted under the WPS and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, shoes plus socks, protective eyewear, chemical-resistant gloves - Category A (e.g., barrier laminate, butyl rubber, nitrile rubber, polyethylene, polyvinyl chloride (PVC) or viton).

# NON-AGRICULTURAL USE REQUIREMENTS

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

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

Avoid working in spray mist.

Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Certain states may require more restrictive reentry intervals; consult your State Department of Agriculture for further information.

# USE INSTRUCTIONS AND INFORMATION

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

When THIS PRODUCT is applied at less than 10 gallons per acre finished spray volume, a drift control or spray deposition additive SHOULD be used. Refer to the additive label for rates of applications, directions for use, limitations, and restrictions.

# 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 determines 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 outer most nozzles on the boom must not exceed 3/4 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°.

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

The applicator should be familiar with and take into account the information covered in the 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 management strategy is to apply the largest droplets that provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environment conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

# **Controlling Droplet Size**

Volume - Use high flow rate nozzles to apply the highest 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 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 3/4 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 application 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 downwind. 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 2-10 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 can not occur during a 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 cloud 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 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).

# **USE INFORMATION**

THIS PRODUCT is a liquid formulation containing 3 lbs. of active ingredient per gallon. It contains a nontoxic odor to help prevent accidental ingestions. It also contains an emetic (an agent which will induce vomiting if the product is swallowed).

# APPLICATION

THIS PRODUCT is a contact herbicide for control or suppression of a broad spectrum of emerged weeds including most small annual broadleaf and grass weeds. It can also be used to suppress perennial weeds by destroying green foliage and as a desiccant/ defoliant at harvest.

Complete coverage of target weeds is necessary to get good control because THIS PRODUCT is a contact-type herbicide. It is also necessary to obtain complete coverage for good crop desiccation and defoliations. Undesirable weed control and undesirable crop desiccation/defoliation will result if improper application technique and/or application to large, stressed, or mown weeds are made. Refer to the following details for specific application instructions.

Thorough coverage of all green foliage is required for efficacious weed control and crop defoliation and desiccation because THIS PRODUCT requires actively growing green plant tissue to function. Drought-stressed weeds, weeds with little green foliage (i.e., mowed or cut weeds), or mature woody bark of trees and vines are unaffected by application with THIS PRODUCT.

There is no residual soil activity to affect later-planted crops or later germinating weeds because clay and organic matter rapidly tie up THIS PRODUCT.

# **ROTATIONAL CROPS**

After the last application THIS PRODUCT, all rotational crops may be planted immediately.

#### RAINFASTNESS

Rain occurring 30 minutes or more after application will have no effect on the activity of THIS PRODUCT because it is rapidly absorbed by the weed foliage.

# USE OF A NONIONIC SURFACTANT OR CROP OIL CONCENTRATE

The following should always be added and be used at the recommended rates or there will be a reduction in efficacy of THIS PRODUCT. **Nonionic Surfactant:** Either add a nonionic surfactant cleared for the current use containing 50-74% surface-action agent at 0.25% v/v (2 pts./100 gals.), or add nonionic surfactant containing 75% or more surface-active agent at 0.125% v/v (1 pt./100 gals.), of the finished spray volume for ground applications. Add a nonionic surfactant at 0.25% v/v (2 pts./100 gals.) of the finished spray volume for aerial applications.

**Crop Oil Concentrate:** For ground applications, add a nonphytotoxic crop oil concentrate cleared for the current use that contains15-20% approved emulsifier, with 1.0% v/v (1 gal./100 gals.) of the finished spray volume. Add 1 pt. of crop oil concentrate per acre for aerial applications. For cotton harvest aid, do not use crop oil concentrate when using THIS PRODUCT. NOZZLE SELECTION

The use of flat-fan nozzles is the most effective application of THIS PRODUCT. The use of flood nozzles may result in a reduction of weed control due to inadequate coverage because they produce large uneven droplets.

Use only flat fan nozzles when spraying less than 20 gallons of spray carrier per acre using the following table.

	Nozzle Type		
	Flat Fan	Flood	
Maximum Size	8	15	
Spray Pressure (at nozzle)	30-50 psi	30-50 psi	
Maximum Nozzle Spacing	30"	40"	
Direction of Spray Pattern	Down	Down	
Maximum Speed	10 mph	10 mph	
Spray Overlap (at each edge)	30%	50%	

Nozzle Type and Spray Pressures and Setup

Reduced control will result if nozzles, pressures, or setups differ from the above chart.

#### SPRAY CARRIER

THIS PRODUCT may be inactivated by muddy water, or suspension-type fertilizers containing clay. Therefore, always use clean water (free of mud or clay), clear liquid nitrogen, or complete clear liquid fertilizers as the carrier when spraying this product. Never use suspension-type fertilizers containing clay as the spray carrier. Always use the higher rate of THIS PRODUCT and surfactant if using a complete clear liquid fertilizer containing high phosphate levels as the spray carrier.

Note: It is important that when using liquid fertilizers such as 28% N as a spray carrier, that nonionic surfactant still be used with THIS PRODUCT. The use of liquid fertilizer carriers are not substitutes for surfactants.

# **RATES OF THIS PRODUCT**

With each use, follow rates listed in the following tables. When weeds are larger or are dense, use the higher label rates. For use as a harvest aid, use higher rate when crop vegetation is dense. Do not exceed 0.50 lbs. a.i. per acre in a minimum of 30 gallons of spray for broadcast applications with backpack sprayers.

#### SPRAY VOLUME

With each use, follow rates listed in the following tables. Spray volumes should be increased as necessary to obtain complete coverage of the target weed or plant without runoff from the foliage, because the volumes listed are minimum volumes only.

TARGET WEEDS SHOULD NOT EXCEED SIX INCHES IN HEIGHT WHEN SPRAYING LESS THAN 20 GALLONS OF SPRAY CARRIER PER ACRE.

#### **APPLICATION TIMING**

Applications should be made to small emerged weeds. Larger weeds more than 6 inches in height may be more difficult to control than weeds 1 to 6 inches in height. If possible, when green foliage is removed either from grazing or mowing, allow the weeds to grow 2 to 4 inches in height. Also, during harvesting forage or grain crops before spraying, weeds present in the field are also cut. Therefore, raise cutter bars as high as possible from the ground to cut stubble and weeds at a greater height, allowing sufficient green foliage to remain for applications.

#### BURNDOWN OF GRASS COVER CROPS OR VOLUNTEER CEREALS

The best results occur for control of grass cover crops or volunteer cereals when THIS PRODUCT is applied prior to tillering or after boot stage, especially with a wheat cover crop or volunteer wheat. Complete control may not be achieved with treatments made between tillering and boot stage. Complete control of perennial cover crops should not be expected.

#### **ENVIRONMENTAL CONDITIONS**

This product is active over a wide range of environmental conditions such as cool (below 55°F), cloudy or overcast weather. However, these conditions will slow the activity of THIS PRODUCT.

#### SPOT SPRAYING

Refer to the following table if only small areas are to be sprayed with labeled applications.

If the Broadcast Rate Per Acre for THIS PRODUCT is:	Add The Following Amount of THIS PRODUCT to 1 Gallon of Water
1 1/2 pts.	1/3 fl. oz
2 pts.	3/8 fl. oz.
2 1/2 pts.	1/2 fl oz.
3 pts.	2/3 fl. oz.

#### Mixing Instructions for Small Quantities for Spot Spraying

Add 1/3 - 1/2 fl. oz. of a nonionic surfactant for each gallon of spray at all times. Thoroughly wet the foliage, but not to the point of runoff when spot spraying in this manner.

# TANK MIXING: ENHANCED BURNDOWN OF DIFFICULT-TO-CONTROL WEEDS AND FOR RESIDUAL WEED CONTROL

# **Photosynthetic Inhibitor Herbicides**

To control difficult weeds, tank mix THIS PRODUCT with other herbicides. The addition of other photosynthetic inhibitors (PSI) herbicides will slow the activity of THIS PRODUCT. This allows THIS PRODUCT to thoroughly distribute throughout a treated leaf, thus achieving better control than if THIS PRODUCT was applied alone.

Atrazine Herbicide Bicep Lite II MAGNUM® Herbicide Bicep MAGNUM® Herbicide Canopy® Herbicide Lariat® Herbicide Lariat® Herbicide Linex® Herbicide Linex® Herbicide Lorox® Herbicide Lorox Plus™ Herbicide Princep® Herbicide Sencor® Herbicide Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.

# Improved Weed Control with PSI's

The addition of a PSI herbicide will help improve the control of difficult weeds listed below. Make a second application for best results.

Barnyardgrass Broadleaf signalgrass Cheatgrass Cocklebur Fall panicum Giant ragweed Knotweed Kochia Lambsquarters Malva (cheeseweed) Marestail Morningglory Pennsylvania smartweed Perennial weeds (suppression only) **Prickly lettuce** Sedges Tansymustard Velvetleaf Volunteer wheat

# Improved Control of Perennial and Annual Broadleaf Weeds

Tank mixing with labeled 2,4-D ester (Low Volatile), 2,4-DB or Banvel\* herbicide will help improve control when perennial broadleaf weeds such as Canada thistle, bindweed, dandelion, etc., or difficult to control annual broadleaf weeds such as giant ragweed or morningglory are present. Reduced grass control may be achieved when tank mixing the amine formulation of 2,4-D with THIS PRODUCT.

## Order of Tank Mixing

It is advisable to tank mix THIS PRODUCT and other listed products as follows:

- 1. Fill spray tank 1/2 full with clean water or other approved carriers such as clear liquid fertilizer.
- 2. Begin tank agitation and continue throughout mixing and spraying.
- 3. Add dry formulations (WP, DF, etc.) to tank.
- 4. Add liquid formulations (SC, EC, L, etc.) to tank.
- 5. Add THIS PRODUCT to tank.
- 6. Add nonionic surfactant to tank.
- 7. Fill remainder of spray tank.

Always read other pesticide products labels for weeds controlled, rates of applications, directions for use, limitations, and restrictions.

It is advisable to perform a jar test to check physical compatibility when using different formulation of the herbicides listed on this label.

# USE PRECAUTIONS AND RESTRICTIONS

#### EQUIPMENT

THIS PRODUCT is **corrosive to aluminum**. Thoroughly flush all aluminum spray equipment and aluminum aircraft structures that are exposed to spray solution or spray drift with water immediately after use.

The activity of THIS PRODUCT may be reduced in dry areas where dust stirred up by high winds or equipment tires can coat weed or plant leaves. Therefore, avoid applications in extremely dusty conditions.

#### LIMITATIONS AND PRECAUTIONS

- Unless otherwise indicated, THIS PRODUCT will severely injure or kill crop plants emerged at time of application if they come in contact with sprays.
- · Do not pasture livestock in treated fields or feed treated foliage in cotton when this product is used as a cotton harvest aid.
- · Do not use around home gardens, schools, recreational parks, or playgrounds.
- Do not apply to soils lacking clay minerals such as peat, muck, pure sand, artificial planting media for preplant and preemergence (to the crop) uses.
- To enable maximum weed and grass emergence prior to treatment, seedbeds and plantbeds should be formed as far ahead of planting and treatment as possible.
- · Avoid disturbing soil when seeding or transplanting.
- Transplanted plants may become damage when they come in contact with plastic mulch used for preplant weed control and that has been treated with this product. To prevent damage to the crop, sufficient wash-off such as rainfall or sprinkler irrigation prior to planting may be needed.
- THIS PRODUCT will be ineffective in controlling or suppressing weeds and grasses that have emerged after application.

# **APPLICATION INSTRUCTIONS**

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Сгор	Weeds	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALFALFA (California only) New seedlings		Broadcast	0.7-1.3 pts. See Table on "Alfalfa: New Seedlings (CA Only)"	Ground: 10 gals. Air: 5 gals.	70	<ul> <li>Do not make more than one application per year.</li> <li>Apply during late winter or early spring.</li> <li>Do not cut or harvest within 70 days after application.</li> <li>Alfalfa foliage present at time of application will be burned.</li> <li>Replanting may be needed due to the reduction of seedling stands.</li> <li>Do not apply to seedling alfalfa grown for seed.</li> </ul>
ALFALFA Preplant or Preemergence (No-till or conventional planting)		Broadcast or Banded Over Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.		<ul> <li>Do not make more than 2 applications per year.</li> <li>Apply prior to emergence of the crop. Avoid disturbing soil when seeding.</li> <li>Crop plants emerged at time of application will be killed.</li> </ul>
ALFALFA Dormant season Established plantings Region A - See table at end of Alfalfa section	Weeds, including bluegrass, chickweed, henbit, downy brome, ryegrass, cheatgrass, dogfennel, tansymustard, London rocket, sowthistle, rescue brome, wild oats, and other winter annuals; and suppression of perennial weeds.	Broadcast	1.3-2.0 pts.	Ground: 10 gals. Air: 5 gals.	42	<ul> <li>Do not make more than one application per year.</li> <li>Fall regrowth: Do not apply if last fall cutting is greater than 6."</li> <li>Spring regrowth: Do not apply if last cutting is greater than 2".</li> <li>After the crop is dormant, apply to well-established stands that are at least 1-year old.</li> <li>Yield of first cutting may be reduced because alfalfa foliage present at the time of application will be burned.</li> <li>Do not cut or harvest within 42 days after application.</li> <li>For improved and longer-lasting weed control, tank mix with metribuzin label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>
ALFALFA Dormant season Tank Mix with Velpar® L-Herbicide Region A - See table at end of Alfalfa section	Weeds including chickweed, downy brome and tansymustard.	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 10 gals.	42	<ul> <li>Do not make more than 2 applications per year.</li> <li>When weeds are less than 4 inches tall apply at 0.7 pt. rate THIS PRODUCT</li> <li>Mix THIS PRODUCT with 1-2 qts. of Velpar L per acre.</li> <li>Use lower rate of Velpar L on loamy sands or sandy loams. Always refer to the Velpar L label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> <li>During the dormant season, make one application to established alfalfa stands .</li> <li>Fall regrowth: Do not apply if last fall cutting is greater than 6."</li> <li>Spring regrowth: Do not apply if last cutting is greater than 2".</li> <li>Do not apply to alfalfa during the first season after seeding.</li> <li>Temporary chlorosis may occur on alfalfa regrowth.</li> <li>Increased chances of crop injury may occur if stress which may be caused in part by low fertility, disease, insects, winterkill, over cutting, drought or frost.</li> <li>DO NOT USE on gravelly or nocky soils, exposed subsoils, hardpan, sand or poorly drained alkaline soils as crop injury, including mortality, may result.</li> <li>Do not cut or harvest within 42 days of application.</li> </ul>

Crop	Weeds	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALFALFA Dormant Season On established plantings: Region B: See table at end of Alfalfa section.	Weeds including London rocket, sowthistle, rescue brome, wild oats, chickweed, ryegrass, bluegrass, cheatgrass, dogfennel, tansymustard,	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	<ul> <li>Do not make more than one application per year.</li> <li>Appy before first spring cutting and during late fall or winter months after the last fall cutting.</li> <li>California: Do not apply if spring regrowth after grazing or cutting is more than 2 inches in Orange and</li> </ul>
On fall-seeded newly established stands less than 1- year-old: Region A - See table at end of Alfalfa section	henbit, downy brome, and other winter annuals; and suppression of perennial weeds <b>California:</b> Desiccation of weeds including bluegrass, ryegrass, shepherdspurse, chickweed, tansymustard, foxtail, sowthistle and groundsel.	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	<ul> <li>Riverside counties, and all counties north of these counties.</li> <li>All other areas within Region B: Do not apply if regrowth after grazing or cutting is more than 2 inches.</li> <li>Do not harvest within 60 days of application.</li> <li>Applications to alfalfa that is not dormant, or has broken dormancy, may result in stand and/or yield reductions. Replanting may be necessary. Green alfa foliage present at time of application will be burned.</li> <li>If there is a severe weed infestation, total hay yield of first cutting may be reduced in alfalfa fields and the reduction is typically directly proportionate to the loss of weed weight.</li> <li>For improved and residual weed control in dormant established (at least 1-year-old) alfalfa, tank mix with metribuzin (Lexone or Sencor). Do not apply tank mi with metribuzin on alfalfa that is less than 1-year-old.</li> <li>Always refer to metribuzin label for weeds</li> </ul>
On fall-seeded newly established stands less than 1- year-old: Region B - See table at end of Alfalfa section		Broadcast	0.5-0.8 pts.	Ground: 10 gals. Air: 5 gals.	60	<ul> <li>Always refer to metribuzin label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> <li>California</li> <li>If ryegrass, shepherdspurse, sowthistle or groundsel are present, use higher rate.</li> </ul>

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Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALFALFA (East of the Rocky Mountains) Between-cuttings treatment in established plantings. (Includes first year alfalfa)	Broadcast	0.7 pt.	Ground: 10 gals.	30	<ul> <li>Do not make more than 3 applications per year.</li> <li>Control of weeds beyond the seedling stage and weed stubble cut off during harvest are less affected by this treatment.</li> <li>Make applications immediately after alfalfa has been removed for hay or silage.</li> <li>Do not treat more than 5 days after cutting.</li> <li>A reduction in first year alfalfa stands and yeilds may occur if alfalfa is allowed to regrow more than 2 inches.</li> <li>Burning of alfalfa foliage will occur at time of application.</li> <li>Weed control may be reduced where moisture is limited such as in arid climates.</li> <li>Do not cut or harvest within 30 days of application.</li> <li>Apply as needed up to three times during the growing season in addition to a dormant application.</li> <li>Do not make more than 2 applications during the first growing season of first-year alfalfa.</li> </ul>

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	Rate/Acre*				
For Control of:	For Suppression	For Control			
Annual Bluegrass	-	10.7-21.3 fl. oz.			
Chickweed		10.7- <u>2</u> 1.3 fl. oz.			
Fiddleneck (6 inches tall or less)	5.4-10.7 fl. oz.	21.3 fl. oz.			
Red Maids (6 inches tall or less)		10.7-21.3 fl. oz.			
Shepherdspurse	10.7-21.3 fl. oz.				
Spikeweed (4 inches tall or less)	5.4 fl. oz.	10.7-16.0 fl. oz.			
Volunteer Small Grain (8 inches tall or less)	5.4-10.7 fl. oz.	21.3 fl. oz.			

\*Use the 5.4 fl. oz. rate only when alfalfa has at least 3 trifoliate leaves; use the 10.7 fl. oz. rate only when alfalfa has 6 trifoliate leaves; or use rates over 10.7 fl. oz. only when there are 9 trifoliate leaves.

Alfalfa - Regions

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# **REGION A**

Alaska, California (counties of Del Norte, Siskiyou, Modoc, Shasta, Lassen, Plumas, Sierra and Nevada), Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming

# **REGION B**

Alabama, Arizona, Arkansas, California (all other counties not listed in Region A), Florida, Georgia, Hawaii, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
ALMONDS	Directed Spray	0.8-2.7 pts.	Ground: 10 gals.	-	<ul> <li>Do not make more than 5 applications per year.</li> <li>Avoid allowing spray to contact green stems (except suckers) or foliage.</li> <li>When spraying around young trees, use a shield or wrap plant.</li> <li>Do not graze treated areas and do not feed cover crops grown in treated areas to livestock.</li> <li>Do not apply when nuts to be harvested are on the ground.</li> <li>Retreatment or spot treatments may be necessary for mature woody weeds, perennial weeds, late germinating weeds and greer suckers.</li> </ul>
ARTICHOKE (GLOBE)	Directed Spray	1.7-2.7 pts.	Ground: 20-100 gals.	1	<ul> <li>Do not make more than 3 applications per year.</li> <li>Do not exceed 8 pts. per season.</li> <li>Applications must be made at least 7 days apart.</li> <li>Do not harvest within 24 hours of last application.</li> </ul>
ASPARAGUS	Preplant or Preemergence Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply prior to emergence of the crop.</li> <li>Emerged asparagus at time of application will be killed.</li> </ul>
ASPARAGUS Preemergence to established plantings at least 2 years old.	Broadcast or Banded Over-Row	1.7-2.7 pts.	Ground: 10 gals.	6	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply prior to emergence of the crop or after last harvest.</li> <li>Emerged asparagus at time of application will be killed.</li> </ul>

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Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
BEANS, DRY Not for use in California Sweet lupin White sweet lupin White lupin Grain lupin Adzuki beans beans Black beans Broad beans Field beans Garbanzo beans Kidney beans Lablab beans Mung beans Navy beans Pinto beans Rice beans Tepary beans Urd beans Guar PEAS, DRY Not for use in California Blackeyed peas Chickpeas Cowpeas Cowpeas Southern peas Catjang	Harvest-Aid	0.8-1.3 pts.	Ground: 20 gals. Air: 5 gals.	7	<ul> <li>Do not make more than 2 applications per year.</li> <li>Add nonionic spreader at 1 qt/100 gals of spray mix.</li> <li>Use a single application of the higher rate for vining type beans or bush type with lush growth.</li> <li>May also be applied as a split application and may improve vine coverage. However do not make more than 2 applications per year or exceed a total of 1.3 pints per acre.</li> <li>Apply when at least 80% of the pods are yellowing and mostly ripe and when leaves are no more than 40% of bush type peas or beans or 30% of vine type peas or beans are green .</li> <li>Do not apply when weather conditions favor spray drift. To reduce drift, a drift control agent may be included.</li> <li>Not registered for use in dry beans and dry peas in California.</li> </ul>
BERRIES Blackberry, Blueberry, Boysenberry, Currant, Elderberry, Gooseberry, Huckleberry, Loganberry, Raspberry	Postemergence Directed Spray	1.3-2.7 pts.	Ground: 50 gals.	-	<ul> <li>Do not make more than 5 applications per year.</li> <li>New canes or shoots can be injured. Therefore, apply before their emergence.</li> <li>To prevent crop injury from spray mist, apply as a coarse spray.</li> </ul>
CACAO	Directed Spray	1.3-2.7 pts.	Ground: 50-200 gals.	1	<ul> <li>Do not make more than 5 applications per year.</li> <li>Apply when weeds are succulent and growth is from 1-6".</li> <li>Retreatment or spot treatments may be necessary for mature woody weeds, late-germinating weeds and grasses and for perennials.</li> <li>Use a shield for young trees to prevent sprays from contacting cacao plants, as injury may result.</li> <li>Do not spray under windy conditions.</li> <li>Do not graze treated areas or feed treated cover crops to livestock.</li> </ul>
CASSAVAS, TANIERS & YAMS (Puerto Rico only)	Shielded Post Directed Spray	1.3 pts.	Ground: 50 gals.	90	<ul> <li>Cassavas and Taniers: Do not make more than 3 applications per year.</li> <li>Yams: Do not make more than 2 applications per year.</li> <li>Make applications when weeds are succulent and growth is 1-6".</li> <li>Prevent spray from contacting crop to prevent injury to crop.</li> <li>Do not spray under windy conditions.</li> <li>Do not graze treated areas or feed treated forage to livestock.</li> </ul>

# Use Information for Chemical Fallow

- As the density of stubble, crop residue or weeds increases, use higher spray volumes for better coverage.
- To control volunteer wheat or downy brome, fall-applied treatments generally work best with THIS PRODUCT. If possible, tank mix with atrazine for maximum burndown and residual control.
- · Apply from immediately after harvest up to emergence of the newly seeded crop as a broadcast or band treatment.
- Before applying THIS PRODUCT, cut wheat as high as possible to avoid cutting weeds too short, and allow the weeds to grow at least 2-3" after harvest .
- The addition of dicamba (Banvel) or 2,4-D ester (Low Volatile) may aid in the suppression of emerged perennial broadleaf weeds and large annual broadleaf weeds. Always refer to the product label(s) for 2,4-D ester (Low Volatile), Banvel, or residual herbicide for rates of applications, directions for use, limitations, and restrictions.
- It is permissible to tank mix with registered residual herbicide combinations other than listed for extended weed control during the fallow period
- Weeds and grasses emerging after application and weeds taller than 6 inches will not be controlled.
- · Crop plants emerged at the time of application will be killed.
- The minimum total spray per acre allowed is 5 gallons for ground and 5 gallons for air applications.
- Apply 5-60 gallons spray mix per acre by ground application. When applying at less than 10 GPA by ground: Do not apply with floaters or exceed a speed of 10 mph.
  - Apply with flat fan nozzles at 30-40 psi.
  - Apply only in a tank mix with atrazine at a minimum of 0.5 lb. a.i./acre.
- By air: apply in 5-10 gallons of spray mix per acre.

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
CHEMICAL FALLOW Continuous Wheat (2-3 month recropping interval)	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2.0 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply at least 45 days before seeding.</li> <li>For volunteer wheat or downy brome control in spring, use at least 1.3 pts. of THIS PRODUCT per acre with a Photosynthetic Inhibitor Herbicide.</li> <li>Refer to the section "Use Information for Chemical Fallow".</li> </ul>
CHEMICAL FALLOW Wheat-Fallow- Wheat Rotations (Fall applied after harvest; seeded 12- 14 months later)	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Spray before weeds produce seeds.</li> <li>Control of volunteer wheat and downy brome control increases when applications are made late August or early September.</li> <li>For improved burndown and residual control of weeds, tank mix with Atrazine, Marksmane Herbicide, or Commande Herbicide.</li> <li>For improved burndown and residual control of grass and broadleaf weed tank mix with metribuzin (Sencor 75DF).</li> <li>Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> <li>Refer to the section "Use Information for Chemical Fallow".</li> </ul>
CHEMICAL FALLOW Wheat-Fallow- Wheat Rotations (Spring applied: seeded 3-5 months later)	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>To conserve moisture, application should be made March 1 to April 15, prior to spring rains.</li> <li>Even though moisture loss is greater when applications are made after the boot stage, volunteer wheat is easier to control after this stage.</li> <li>For volunteer wheat or downy brome control in spring, use at least 1.3 pts. of THIS PRODUCT per acre with a Photosynthetic Inhibitor Herbicide.</li> <li>Refer to the section "Use Information for Chemical Fallow".</li> <li>For burn down and residual control of grass and broadleaf weeds, tank mix with metribuzin, (Sencor 75DF/Lexone).</li> <li>Always refer to the label for metribuzin (Sencor 75DF/Lexone) for rates of applications, directions for use, limitations, and restrictions.</li> </ul>
CHEMICAL FALLOW Wheat-Annual Crop <sup>1</sup> -Wheat Rotations (Fall applied in wheat stubble)	Broadcast .	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>For improved burndown and residual weed control, tank mix with Atrazine or Marksman. Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> <li>Make applications after wheat harvest and before weeds produce seed.</li> <li>If grasses such as foxtails or barnyardgrass recover, respray before seed production.</li> <li>Applications made late August to November help control volunteer wheat and downy brome.</li> <li>Refer to the section "Use Information for Chemical Fallow".</li> </ul>
CHEMICAL FALLOW Wheat-Annual Crop-Wheat Rotations (Spring applied prior to planting an annual crop <sup>1</sup> )	Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>For enhanced burndown and residual weed control, tank mix with Atrazine. Always refer to the respective product label(s) for Atrazine for rates of applications, directions for use, limitations, and restrictions.</li> <li>For volunteer wheat or downy brome control in spring, use at least 1.3 pts. of THIS PRODUCT per acre with a Photosynthetic Inhibitor Herbicide.</li> <li>Refer to the section "Use Information for Chemical Fallow".</li> <li>Refer to the Atrazine label for directions pertaining to soil pH and recropping intervals.</li> </ul>

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Сгор	Weeds	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
CLOVER AND OTHER LEGUMES Including velvetbean, lespedeza, lupine, sainfoin, trefoil, vetch, crown vetch, and milk vetch. Dormant Season: On established plantings: Region A – See table at end of Alfalfa section.	For desiccation of weeds, including London rocket, sowthistle, rescue brome, wild oats, chickweed, ryegrass, bluegrass, cheatgrass, dogfennel, tansymustard, henbit, downy brome, and other winter annuals, and suppression of perennial weeds. California - Use for desiccation of weeds including bluegrass, ryegrass, shepherdspurse, chickweed, tansy mustard, foxtail, sowthistle and groundsel.	Broadcast	1.3-2.1 pts.	Ground: 10 gals. Air: 5 gals.	60	<ul> <li>Do not make more than 1 application per year.</li> <li>Apply during late fall or winter months after the last cutting and before first spring cutting.</li> <li>Do not apply if regrowth after grazing or cutting is more than 2".</li> <li>Do not harvest within 60 days of application.</li> <li>CAUTION: Stand and/or yield reductions may occur when applications are made to clover or other legumes that are not dormant, or have broken dormancy. Therefore, it may be necessary to replant. Burning will occur to green clover or other legumes' foliage present at the time of application.</li> <li>Discoloration and temporary stunting will occur in clover or other legumes foliage present at the time of application.</li> <li>If there is severe weed infestation, the total hay yield of first cutting may be reduced in clover or other legumes fields and is usually directly roportionate to the loss of weed weight.</li> </ul>
Dormant Season: On established plantings: Region B - See table at end of Alfalfa section.		Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	In California: • If ryegrass, shepherdspurse, sowthistle or groundsel are present, use higher rate.
Dormant Season: On fall-seeded, newly established stands less than 1-year-old: Region A - See table at end of Alfalfa section.		Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	60	
Dormant Season: On fall-seeded, newly established stands less than 1-year-old: Region B - See table at end of Alfalfa section.		Broadcast	0.5-0.8 pts.	Ground: 10 gals. Air: 5 gals.	60	

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THIS PRODUCT Crop **Use Pattern** Additional Precautions, Restrictions and Directions Minimum Grazing or **Rate Per Acre** Total Spray Preharvest Per Acre Interval (Days) Weeds 1-3": CORN Preplant or · Do not make more than 3 applications per year. Ground: Preemergence **FIELD CORN** · Includes field, fresh sweet, forage, fodder and 1.3-1.7 pts. 10 gals. popcorn. POPCORN Broadcast or SWEET CORN Banded Over Row Weeds 3-6": Air: 5 gals. · To permit maximum weed and grass emergence, seedbeds should be SEED CORN 1.7-2 pts. formed as far ahead of planting and treatment as possible. (Used alone) · Seeding should be done with a minimum amount of soil disturbance. Weeds 6": 2-2.7 pts. · Control will not occur when applications are made after weeds and grasses have emerged. However, crop plants emerged at time of application will be killed. · Do not make more than 3 applications per year. CORN Weeds 1-3": Preplant or Ground: Tank mixes for no-· Apply as broadcast sprays before, during or after planting, but before Preemergence 1.3-1.7 pts. 10 gals. till/ reduced till Broadcast or Banded crop emergence. Over Row Air: 5 gals.\* . THIS PRODUCT may be tank mixed with the following herbicides for Weeds 3-6": improved burndown or residual control: 2,4-D Ester (Low Volatile) Harnesse Harnesse Xtra 1.7-2 pts. AAtrex<sub>®</sub>/Atrazine Lasso<sub>®</sub> Herbicide Banvel<sub>®</sub> Linex<sub>®</sub> Bicep MAGNUMe Loroxe Weeds 6": 2-2.7 pts. Bicep Lite II MAGNUMe Princepe Dual MAGNUM Prowle Herbicide Frontiero Simazineo Guardsmane Surpasse EC Harmony<sub>®</sub> Extra Herbicide Surpass<sub>®</sub> 100 (Preplant only) Topnotche • THIS PRODUCT may also be tank mixed with Ambusheinsecticide. · Always refer to respective product label(s) for rates of applications, directions for use, limitations, and restrictions. \* Always refer to respective product label(s) to confirm if these products can be applied by air. FIELD CORN. · Do not make more than 3 applications per year. Postemergence 0.7-1.3 pts. Ground: · Apply when weeds are actively growing. POPCORN. **Directed Spray** 10 gals. · Use a higher rate on larger or hard to control weeds. Weeds 6" or taller (including Hooded or SWEET CORN, may not be controlled. SEED CORN Shielded) · Severe damage and/or complete kill can occur if spray contacts corn plants For Hooded Or Shielded Sprayers: · Use a hooded or shielded sprayer with skids or wheels on the spray boom to maintain spray height in order to prevent excessive crop phytotoxicity. · Apply by directing spray between the rows and using hooded or shielded sprayers to prevent spray contact with crop plants. For Directed Spray Without Hooded Or Shielded Sprayers: Corn height is measure from soil surface to top of whorl. · Apply when corn is at least 10" tall with nozzles arranged to spray no higher than the lower 3" of corn stalks. · Corn plants shorter than 10" may be injured and not recover. • For corn more than 20" tall: Arrange the nozzles to spray no higher than the lower 1/3 of the corn stalks. Injury to corn foliage will occur if sprayed. However, corn will recover and develop normally.

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
FIELD CORN, POPCORN, SEED CORN	Harvest Aid Broadcast	0.8-1.3 pts.	Ground: 20 gals. Air: 5 gals.	7	<ul> <li>Do not make more than one application per year. Make ONE (1) application at least 7 days prior to harvest.</li> <li>Apply after the corn is mature. This is indicated by a black layer which forms at the base of the kernels. You may consult your local agricultural authority for help in identifying the black layer.</li> <li>Add nonionic surfactant containing at least 75% surface active ingredient at 0.25% v/v.</li> <li>To desiccate mature broadleaf weeds and grasses or broadleaf weeds and grasses that are taller than 18", use 1.3 pts.</li> <li>Drought stressed plants, especially broadleaf weeds, can be difficult to kill, and desiccation may not be complete.</li> </ul>
FIELD CORN ONLY (grain, fodder, forage)	Postemergence Directed Spray USDA Witchweed Eradication Program	1.3 pts.	Ground: 10 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>If regrowth occurs, initiate sprays in late June to early July and repeat in early August.</li> <li>Follow application instructions in post-emergence directed spray section above.</li> </ul>
FIELD CORN ONLY (grain, fodder, forage) 2,4-D Amine AE Tank Mix	Postemergence Directed Spray USDA Witchweed Eradication Program	5.4 fl. oz. + 0.5 lb. 2,4-D Amine AE	Ground: 10 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply as directed spray onto grassy weeds and witchweed before witchweed blooms. If regrowth occurs, reapply.</li> <li>Follow application instructions in post-emergence directed spray section above.</li> <li>Always refer to respective product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> </ul>
COTTON (Use Directions for All Cotton Uses)		All Cotton Uses			Do not exceed 8 pints of this product (3 lbs. a.i.) per acre per season for all uses on Cotton.
COTTON (Used alone)	Preplant or Preemergence	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	Do not make more than 3 applications per year. Apply prior to, during or after planting, but before crop emergence. For fallow bed treatment, beds should be preformed to permit maximum weed and grass emergence prior to treatment. Seeding should be done with a minimum of soil disturbance.
COTTON (California only; Used alone)	Preplant	5.4-10.7 fl. oz.	Ground: 10 gals. Air: 5 gals.	_	<ul> <li>Do not make more than 3 applications per year.</li> <li>For control of volunteer barley in preformed seedbeds.</li> </ul>
COTTON Goale Herbicide Tank Mix	Preplant or Fallow Bed Broadcast	1.7-2.7 pts.	Ground: or Air: 10 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Always refer to the Goal label for weeds controlled, rates of applications, and directions for use, limitations, and restrictions.</li> </ul>
COTTON Other Tank Mixes	Preplant or Preemergence	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply as a broadcast spray before, during or after planting, but before crop emergence.</li> <li>For improved residual control or burndown, THIS PRODUCT may be tank mixed with the following herbicides:         <ul> <li>Caparol® Herbicide</li> <li>Cotron® Herbicide</li> <li>Cotron® Herbicide</li> <li>Cotron® Herbicide</li> <li>Diuron</li> <li>Dual MAGNUM®</li> <li>Harmony Extra (Preplant Only)</li> <li>Meturon® Herbicide</li> <li>Zorial® Herbicide</li> </ul> </li> <li>When tank mixing with Cotoran DFe or Meturon DFe, follow mixing instructions carefully, maintain constant agitation, and see Order of Tank Mixing section in respective labels.</li> <li>When tank mixing with any of the herbicides listed above, always refer to respective product label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
COTTON	Postemergence Directed Spray (Hooded or Shielded)	0.8 to 1.3 pts.	10 gals.		<ul> <li>Maximum number of applications per year is 3.</li> <li>Apply when weeds are actively growing and between 1- 6" in height.</li> <li>If multiple applications are made, allow 14 days between applications.</li> <li>Use higher rate on dense populations and/or larger or hard to control weeds. Weeds 6" or taller may not be controlled.</li> <li>AVOID CONTACT WITH CROP. Intentional or accidental contact, including, drift, of this product with the crop may result in severe damage or loss of the crop.</li> <li>Apply by directing spray between the rows using hooded or shielded sprayers to prevent contact with the crop plant.</li> <li>Equipment should be in good operating condition. Avoid leakage or dripping onto crop. Variation in equipment design may affect the leve of weed control.</li> <li>Keep hoods or shields adjusted to insure adequate contact with weeds while shielding the crop from the herbicide.</li> <li>To minimize drift, do not use nozzles or nozzle configurations or adjuvants which produce fine spray droplets (mist).</li> <li>This product may be tank mixed with other postemergence directed herbicides. Unless otherwise directed on this label, refer to tank mix product labels for rates, directions, limitations and precautions.</li> </ul>

# **Use Precautions and Restrictions**

- Do not make more than 4 applications per year.

- Do not pasture livestock in treated fields or feed treated foliage.

- Do not apply to cotton within 3 days before harvest.

- Repeat application if necessary. Do not exceed a total of 1.3 pts./A as a harvest aid.

- May be tank mixed with other cotton harvest aid materials known to be effective by a local expert. Unless otherwise instructed in this label, always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.

-THIS PRODUCT can be applied in a tank mix with methyl parathion and/or Karate<sup>®</sup> insecticide. Always refer to the respective product label(s) for rates of applications, directions for use, limitations, and restrictions.

- Nodes above cracked bolls (NACB) timing is for guidance and is not intended to restrict the local expert in their use of the product.

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
SOUTHERN COTTON Harvest aid for boll opening and defoliation (Tank mix with phosphate and chlorate defoliants).	Broadcast	5.4 fl. oz. + 1 pt. phosphate or 1 gal. chlorate	Ground: 10 gals. Air: 5 gals.	7	<ul> <li>Do not make more than 4 applications per year.</li> <li>Development of immature bolls will be inhibited.</li> <li>Apply when 80% or more of the bolls are open and the remaining bolls to be harvested are mature.</li> <li>Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> </ul>
SOUTHERN COTTON Additional tank mixes for boll opening and defoliation	Broadcast	2.1-3.3 fl. oz.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 4 applications per year.</li> <li>THIS PRODUCT may be tank mixed with the following products to aid in defoliation and opening of mature bolls. Accelerate<sub>®</sub> Defoliant Def<sub>®</sub> Defoliant the phon Plant Growth Regulator Folex<sub>®</sub> Defoliant Harvade<sub>®</sub> Harvest Growth Regulator Prep<sup>™</sup> PGR</li> <li>Apply when 60% or more of the bolls are open and the remaining bolls to be harvested are mature.</li> <li>Development of immature bolls will be inhibited.</li> <li>Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> </ul>
SOUTHERN COTTON Post Defoliation - To aid in opening of mature bolls and to desiccate green weeds.	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	3	<ul> <li>Do not make more than 4 applications per year.</li> <li>If weed infestation is heavy or dense, use higher rate.</li> <li>Apply when 75% or more of bolls are open and remaining bolls to be harvested are mature.</li> <li>Development of immature bolls will be inhibited.</li> <li>After a defoliation or conditioning application has been made, delay desiccation application of THIS PRODUCT approximately 3-7 days to minimize leaf sticking.</li> </ul>
WESTERN COTTON Harvest aid for boll opening and early defoliation	Broadcast	3.7-5.4 fl. oz. + phosphate or sodium chlorate; and/ or other compatible harvest aid products.	Ground: 10 gals. Air: 5 gals.	7	<ul> <li>Do not make more than 4 applications per year.</li> <li>On rank cotton, use higher rate.</li> <li>Do not use more than 5.4 fl. oz. of THIS PRODUCT for early defoliation as excessive desiccation may occur.</li> <li>Early defoliation timing is when 60% or more of the bolls are open and the remaining bolls to be harvested are mature (approximately 4 NACB).</li> <li>Development of immature bolls will be inhibited.</li> <li>Do not use more than 4.0 lbs. of actual sodium chlorate defoliant per acre at this early defoliation timing.</li> <li>Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> </ul>

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
WESTERN COTTON Harvest aid for boll opening and mid-to-late defoliation	Broadcast	5.4-10.7 fl. oz. alone or tank mix with sodium chlorate or phosphate defoliation and/ or other compatible harvest aid products.	-	3 (Alone)	<ul> <li>Do not make more than 4 applications per year.</li> <li>Use the 10.7 fl. oz. rate of THIS PRODUCT in desert cotton areas or on rank vigorous cotton.</li> <li>Mid-to-late defoliation timing is when 75% or more of the bolls are open and remaining bolls to be harvested are mature (approximately 3 or fewer NACB).</li> <li>Development of immature bolls will be inhibited. Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> </ul>
COTTON Stripper or Spindle Harvested Harvest aid for defoliation and boll opening.	Broadcast	2.1-7.5 fl. oz.	Ground: 10 gals. Air: 5 gals.	3	<ul> <li>Do not make more than 4 applications per year.</li> <li>BECAUSE OF EXTREMES IN ENVIRONMENTAL AND PLANT CONDITIONS, IT IS ADVISABLE TO APPLY THE RANGE OF RATES ON A SMALL BLOCK OF COTTON TO DETERMINE THE RATE THAT BEST FITS YOUR NEEDS.</li> <li>Apply when 75% of the bolls are open and the remaining bolls to be harvested are mature.</li> <li>DEVELOPMENT OF IMMATURE BOLLS WILL BE INHIBITED, SLICE BOLLS AND INSPECT THE SEED FOR MATURITY.</li> <li>THIS PRODUCT may be applied alone or tank mixed with the following cotton harvest aids: Accelerate Defoliant₀ Def Defoliant₀ Dropp Defoliant₀ Ethephone Plant Growth Regulator Folex Defoliant₀ Harvade₀ Harvest Growth Regulator Prep™ PGR</li> <li>May be applied as a split application. Do not exceed a total of 1.3 pts./A.</li> <li>To avoid leaf sticking, apply THIS PRODUCT as a desiccant approximately 3-7 days after defoliant or a conditioning application and 7-14 days before harvest.</li> <li>Cooler temperatures may cause a longer waiting period between application of THIS PRODUCT as a desiccant and defoliation/ conditioner.</li> <li>South of Interstate-10 in Texas, where temperatures are typically higher during defoliation, lower rates in the range may be necessary.</li> <li>Always refer to tank mix product label(s) for rates of applications, directions for use, limitations, and restrictions.</li> </ul>
COTTON Late season desiccation	Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.	3	<ul> <li>Do not make more than 4 applications per year.</li> <li>BECAUSE OF EXTREMES IN ENVIRONMENTAL AND PLANT CONDITIONS, IT IS ADVISABLE TO APPLY THE RANGE OF RATES ON A SMALL BLOCK TO DETERMINE THE RATE THAT BEST FITS YOUR NEEDS.</li> <li>May be applied as a split application. Do not exceed a total of 1.3 pts./A.</li> <li>Apply when 85% of the bolls are open and the remaining bolls to be harvested are mature (approximately 0 NACB).</li> <li>Development of immature bolls will be inhibited. Slice bolls and inspect the seed for maturity.</li> <li>South of Interstate-10 in Texas, where temperatures are typically higher during defoliation, lower rates in the range may be necessary.</li> <li>Delay desiccation application of THIS PRODUCT approximately 3-7 days to minimize leaf sticking if a defoliation or conditioning application has been made.</li> <li>May be tank mixed with other harvest aid materials known to the local expert to be effective.</li> </ul>
COTTON Desiccation of regrowth	Broadcast	0.75-1.25 pts.	Ground: 10 gals. Air: 5 gals.	3	<ul> <li>Do not make more than 4 applications per year.</li> <li>Use to desiccate regrowth occurring after defoliation or desiccation.</li> <li>Because regrowth is difficult to control, thorough coverage with the full listed rate is necessary.</li> <li>Control is dependent on growing conditions and desiccation of small new regrowth may not always be complete.</li> <li>If regrowth is excessive, use higher rate.</li> </ul>
EASTER LILIES (Field grown)	Preemergence	1.7-2.7 pts.	Ground: 10 gals.	-	Do not exceed two applications per year.

Crop **Use Pattern** THIS PRODUCT Grazing or Additional Precautions, Restrictions and Directions Minimum Total Preharvest **Rate Per Acre** Spray Per Acre Interval (Days) FALLOW LAND Preplant 1.0-2.7 pts. Ground: 10 gals. Prior to planting of any Broadcast to · Do not make more than 2 applications per year, during the fallow period. Fallow Land crops. · Fallow land may be between operations such as disking, ripping, plowing, Air: 5 gals. leveling, irrigating or listing for ground preparation purposes · Use for the control of weeds such as bluegrass, chickweed, henbit, downy brome, ryegrass, cheatgrass, dog fennel, tansy mustard, London rocket, sowthistle, rescue brome, wild oats, volunteer cereals and other winter annuals and for suppression of perennial weeds or sedges. · For weeds approaching the maximum size of 6", the higher rate may be used. • No more than 2 applications should be made during the fallow period. · Prior to application allow maximum weed emergence to maximize the benefit of this use. · Adhere to the preharvest intervals and other crop specific restrictions for planted crops elsewhere on this label. GRASSES Preplant, at 1.3-2.7 pts. Ground: · Do not make more than 3 applications per year. Planting, 10 gals. (For seed) · Prepare the seedbeds and allow weeds to germinate. (For use in seedbed · Apply THIS PRODUCT when weeds are at the 3-5 leaf stage. preparation) Preemergence · Applications may be repeated as necessary (but only up to 3 applications per year) prior to grass emergence. · Do not graze treated areas or use the seed or straw from treated areas for animal feed or bedding. GUAR Preharvest 1.3 pts. Ground: 4 · Do not make more than 3 applications per year. · Apply after the pods are fully mature. (Preharvest 10 gals. desiccation) · Do not graze treated areas or use the treated forage for animal feed. **GUAVA** Ground: · Do not make more than 4 applications per year. **Directed Spray** 2.5 pts. 10 gals. · Do not allow spray to contact green stems, fruit or foliage. · Do not graze treated areas. · Do not feed cover crops grown in treated areas to livestock. · Retreatment or spot spraying may be necessary for mature woody weeds, late-germinating weeds and grasses, and perennials. 14 HOPS **Directed Spray** 1.3 pts. Ground: · Do not make more than 3 applications per year. (ID, OR, & WA only) and/ 10 gals. · Retreatment of spot treatment may be necessary. or Suckering · Do not allow spray to contact green stems, foliage, flowers, or cones as and injury may result. Stripping. · Do not allow animals to graze in treated hopyards. · Silage and hop vine refuse may be fed to livestock. · Spray only the basal 2 ft. of the vines for sucking and stripping. Repeat as necessary, but only up to 3 applications per season. · Experience with varieties other than Cascade, Yakima Cluster, and Bullion is limited. If using THIS PRODUCT on other varieties than these, test the use pattern on a small number of vines of each variety to determine sensitivity to injury. Do not use on unlisted varieties if unacceptable crop injury occurs. Chemical Pruning: Spray when vines are less than 3 ft. tall to burn back existing vines and obtain even emergence of subsequent vines · APPLICATION TO HOP VINES LESS THAN 6 FT. TALL MAY CAUSE UNACCEPTABLE INJURY. Ground: · Do not make more than 2 applications per year. LENTILS Harvest Aid 0.8-1.3 pts. 7 20 gals. Add nonionic surfactant at 0.25% v/v (2 pts./100 gals.) of the finished spray NOT REGISTERED FOR **USE ON LENTILS IN** volume Air: 7 gals. • May also be applied as a split application. DO NOT make more than 2 CALIFORNIA. applications or exceed a total of 1.3 pts./A. The split application may improve coverage. · Apply when crop is mature and at least 80% of the pods are yellowing and mostly ripe with no more than 30% of the leaves still green in color. DO NOT apply when weather conditions favor spray drift. To reduce spray drift a drift control agent may be included.

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Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
MINT (Peppermint, Spearmint)	Dormant Season	1.3-2.0 pts.	Ground: 10 gals. Air: 5 gals.		<ul> <li>Do not make more than 2 applications per year.</li> <li>For suppression of weeds such as groundsel, chickweed, downy brome, bluegrass, Italian ryegrass, prickly lettuce.</li> <li>Apply when crop is dormant before spring growth begins and when weeds are less than 6" tall.</li> <li>Do not apply more than 2.0 pts./A per dormant season.</li> <li>May be tank mixed with Sinbare Herbicide (terbacil) weed killer for improved contact activity and residual control of Italian ryegrass, prickly lettuce and groundsel. Apply this tank mixture no more than once per season. Always refer to Sinbar (terbacil) label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>
ONIONS (seeded) AND GARLIC	Preplant/ Preemergence	1.7-2.7 pts.	Ground: 10 gals.	60 200 (CA only)	<ul> <li>Do not make more than 1 application per year.</li> <li>For heavy weed infestations or wild oat control use the higher rate. Apply only one application per season at the 2.7 pts./A dosage.</li> <li>Allow maximum weed and grass emergence prior to treatment but apply prior to crop emergence.</li> <li>Apply a maximum of 2.7 pts./A per season.</li> </ul>
PASSION FRUIT	Directed Spray	2.5 pts.	Ground: 10 gals.		<ul> <li>Do not make more than 5 applications per year.</li> <li>If bark is still green at application time, use a shield or wrap vine.</li> <li>Pick all fruit off the ground prior to application if application is to be made during harvest season.</li> <li>Do not allow animals to graze on treated areas.</li> <li>It may be necessary to retreat or spot treat.</li> </ul>
PEANUTS	Broadcast At Ground Crack Postemergence	5.4-10.8 ft. oz.	Ground: 10 gals.		<ul> <li>Do not make more than 2 applications per year.</li> <li>To control or suppress small (1-6") emerged annual grass and broadleaf weeds in peanuts at ground crack. A second application may be made up to 28 days after ground crack.</li> <li>For at ground crack use, THIS PRODUCT can be tank mixed with Pursuite Herbicide or Dual MAGNUM for residual weed control.</li> <li>Always refer to the Pursuit or Dual Magnum label for a list of weeds controlled, application rates, necessary precautions, and use limitations.</li> <li>Make no more than 2 applications per season and do not apply a total of more than 10.8 fl. oz. of product per acre per season.</li> <li>Crop foliage sprayed will be injured in the form of bronzing and crinkling, but the crop will recover and develop normally.</li> <li>Do not apply by air.</li> </ul>
PEANUTS Basagrane Herbicide Tank Mix	Broadcast At Ground Crack Postemergence	5.4-10.8 ft. oz.	Ground: 10 gals.		<ul> <li>Do not make more than 2 applications per year.</li> <li>Tank mix THIS PRODUCT with Basagran at 1 pt./A. for improved control of weeds such as cocklebur, bristly starbur, smartweed and prickly sida.</li> <li>This tank mix can be applied at the ground crack stage of peanuts. A second application may be made up to 28 days after ground crack.</li> <li>Make no more than 2 applications per season and do not apply a total of more than 10.8 fl. oz. of product per acre per season.</li> <li>Crop foliage sprayed will be injured in the form of bronzing and crinkling, but the crop will recover and develop normally.</li> <li>Always refer to the Basagran label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> <li>If peanuts show injury (leaf phytotoxicity and/or plant stunting) produced by any other herbicide treatment, do not apply this tank mix as injury may be enhanced and/or prolonged.</li> <li>During prolonged periods of drought or unseasonably cold weather do not apply this tank mix as unsatisfactory weed control may result.</li> <li>Do not apply by air.</li> </ul>

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Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
PEANUTS Butyrace Herbicide or Butoxonee 200 Herbicide Tank Mix	Broadcast Postemergence	5.4-10.8 fl. oz.	Ground: 10 gals.	-	<ul> <li>Do not make more than 2 applications per year.</li> <li>For improved control of weeds such as cocklebur, sicklepod and morningglory, tank mix THIS PRÔDUCT with 8-16 oz. (0.125-0.25 lbs.) per acre of Butyrac or Butoxone 200.</li> <li>Do not apply a total of more than 10.8 fl. oz. of product per season and make no more than 2 applications per season</li> <li>Crop foliage sprayed will be injured in the form of bronzing and crinkling but the crop will recover and develop normally.</li> <li>Always refer to the Butyrac or Butoxone 200 labels for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> <li>Do not apply by air.</li> </ul>
PIGEON PEAS (Puerto Rico only)	Directed Spray	1.3 pts.	Ground: 10 gals.	60	<ul> <li>Do not make more than 1 application per year.</li> <li>Avoid contact with pigeon pea foliage.</li> <li>Do not make more than 1 application per season.</li> <li>Do not graze treated areas or feed treated forage to livestock.</li> <li>Cannery waste can be fed to livestock.</li> </ul>
PINEAPPLE	Directed Spray	1.3-2.7 pts.	Ground: 10 gals.	20	Do not exceed 3 applications per season.     More mature weeds may require retreatment.
ΡΟΤΑΤΟ	Preplant or Preemergence Broadcast	0.7-1.3 pts.	Ground: 10 gals. Air: 5 gals.		<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply up to ground cracking stage, before potatoes have emerged.</li> </ul>
POTATO (California, Washington, Oregon, Idaho only; used alone)	Preplant Broadcast	0.4-0.7 pts.	Ground: 10 gals. Air: 5 gals.		<ul> <li>Do not make more than 3 applications per year.</li> <li>For control of volunteer barley in preformed seedbeds.</li> </ul>
POTATO Fresh Market Only Preharvest vine killing and weed desiccation. For Use Only in the states of: Colorado, Delaware, Idaho, Illinois, Indiana, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Utah, Washington, Wisconsin and Wyoming	Broadcast	0.7-1.3 pts.	Ground: 20 gals.	3	<ul> <li>For Fresh Market Potatoes Only. (Fresh Market Potatoes include potatoes that are sent directly from the field to a consumer, grocery store, or processor for use.)</li> <li>DO NOT make more than 2 applications per year.</li> <li>DO NOT use on potatoes that will be stored as tuber decomposition may result.</li> <li>Potatoes must be harvested promptly after desiccation and processed or consumed immediately.</li> <li>DO NOT use to desiccate the vines of seed potatoes as seed pieces may fail to germinate and grow normally.</li> <li>DO NOT pasture livestock in treated potato fields.</li> <li>DO NOT exceed 2.6 pts./A per season.</li> <li>Begin application when leaves begin to turn yellow.</li> <li>Immature potato foliage is tolerant to THIS PRODUCT. However, desiccation will not be complete under this condition.</li> <li>Use 1.3 pts./A rate where quick vine kill is desired.</li> <li>For dense vine growth, use 2 applications of 0.6 pt/ A. Split applications must be applied a minimum of five days apart.</li> </ul>

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Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
RICE	Preplant or Preemergence Broadcast	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7- 2.0 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply as a broadcast spray before, during or after planting, but before crop emergence. When vegetation is dense, use higher rates and spray volumes.</li> <li>Seeding should be done with a minimum amount of soil disturbance.</li> <li>This product will not control weeds and grasses emerging after application. Crop plants emerged at time of application will be killed.</li> <li>THIS PRODUCT may be tank mixed with other herbicides registered for this use for improved or extended weed control. Always refer to the tank mix product label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> <li>Do not flood/flush within 48 hours of application in order to ensure complete kill of vegetation. If cool, cloudy and/or wet weather delays speed of kill, do not flood/flush until complete kill is evident.</li> </ul>
SAFFLOWER	Preplant or Preemergence Broadcast or Banded Over Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply before, during and after planting but before crop emergence.</li> </ul>
SAFFLOWER (California only)	Preplant Broadcast	0.7 pt.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>For control of volunteer barley in preformed seedbeds.</li> </ul>
SMALL GRAINS (Barley, wheat)	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 5 gals. Air: 5 gals.	-	Do not make more than 3 applications per year.
SMALL GRAINS (Wheat Only) Hoelone 3EC Tank Mix	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year. A tank mix with Hoelon 3EC will improve grass control.</li> <li>Apply when weeds are actively growing and 1-6" in height. Weeds 6 inches or taller may not be controlled.</li> <li>Do not apply this tank mix to barley as crop injury may result.</li> <li>Always refer to the Hoelon 3EC label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>
SORGHUM (Grain)	Preplant/ Preemergence Broadcast or Band	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	48 (grain) 20 (forage)	<ul> <li>Do not make more than 3 applications per year.</li> <li>To allow maximum weed and grass emergence, seedbeds should be formed as far ahead of planting as possible</li> <li>Seeding should be done with a minimum amount of soil disturbance.</li> </ul>
SORGHUM (Grain) Atrazine & 2,4-D ester [Low Volatile] Tank Mix	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.		48 (grain) 20 (forage)	<ul> <li>Do not make more than 3 applications per year.</li> <li>THIS PRODUCT may be tank mixed with Atrazine for improved preemergence or residual weed control. The addition of 2,4-D ester (Low Volatile) may assist in the suppression of perennial and annual broadleaf weeds emerged at the time of application. Always refer to the specific product label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>
<b>SORGHUM</b> (Grain) Harmonye Extra Herbicide Tank Mix	Preplant	1.3-2.5 pts.	Ground: 10 gals.	48 (grain) 20 (forage)	<ul> <li>Do not make more than 3 applications per year.</li> <li>For Improved weed control, THIS PRODUCT may be tank mixed with Harmony Extra.</li> <li>Always refer to the Harmony Extra label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>

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Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restric	
SORGHUM (Grain)	Postemergence Directed (Including Hooded or Shielded)	0.7-1.3 pts.	Ground: 10 gals.	48 (grain) 20 (forage)	not be controlled. • Severe damage and/or complete plants. • Do not exceed 2 postemergence 5.3 pts. of THIS PRODUCT per s <b>HOODED OR SHIELDED SPRAY</b> • To avoid excessive crop phytoto skids or wheels on the spray bood • Apply by directing spray between sprayers to prevent spray contact <b>DIRECTED SPRAY WITHOUT HI</b> • Apply when sorghum is at least • Do not exceed 30 psi nozzle pre cause excessive drift. • Use precision directed-spray app than the lower 3" of the sorghum	a to control weeds. Weeds 6" or taller may be kill can occur if spray contacts sorghum be-directed applications or exceed a total of season. <b>YERS</b> xicity, use a hooded or shielded sprayer with om to maintain spray height. In the rows and by using hooded or shielded at with crop plants. <b>OODED OR SHIELDED SPRAYERS</b> 12" tall when naturally standing. ssure or spray under conditions which may polication equipment adjusted so that no more stalk is contacted by the application spray. e degree of injury is related to the precision
SOYBEANS	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7-2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.		emergence. • THIS PRODUCT may be tank m improved burndown or residual of 2,4-DB Canopy Dual MAGNUM Goal Harmony Extra {Preplant Only} Lasso Lexone Linex • The rate of this product to be use weed height and growing conditind dry conditions, use the highest ra- respective product label(s) for a lading the distance of the	of THIS PRODUCT per season. re, during or after planting, but before crop ixed with the following herbicides for control: Lorox Lorox Plus Prowl Pursuit Herbicide Scepter Herbicide Surflan <sub>9</sub> Herbicide Turbo Herbicide ed in these tank mixtures is dependent on ons. Where weed canopy is dense or under ate of THIS PRODUCT. Always refer to the list of weeds controlled, rates of applications,
SOYBEANS 2,4-D ester (Low Volatile) Tank Mix	Preplant or Preemergence	Weeds 1-3": 1.3-1.7 pts. Weeds 3-6": 1.7- 2 pts. Weeds 6": 2-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>to planting.</li> <li>Apply 2,4-D ester (Low Volatile) to planting.</li> <li>Do not apply 2,4-D ester (Low Volatile) not able to accept the results of s stand and yield.</li> <li>Do not use amine formulation as</li> <li>May be tank mixed with residual</li> <li>Always refer to the 2,4-D ester (I</li> </ul>	at 0.35-0.475 lbs. a.i./A at least 7 days prior at 0.475-0.95 lbs. a.i/A at least 30 days prior olatile) prior to planting soybeans if you are soybean injury including possible loss of THIS PRODUCT activity may be reduced.

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
SOYBEANS	Postemergence Directed Spray (Includes Hooded or Shielded)	3.0-5.3 fl. oz.	Ground: 10 gals.		<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply when weeds are actively growing.</li> <li>Use the lower rate of THIS PRODUCT for control of seedling johnsongrass, crabgrass, goosegrass, Brachiaria, Texas millet and pigweed less than 2" tall.</li> <li>For control of 2-4" red rice, Brachiaria, barnyard grass, crabgrass, goosegrass, seedling johnsongrass, giant foxtail, and fall panicum, use 5.3 fl. oz. of THIS PRODUCT.</li> <li>Use 5.3 fl. oz. of THIS PRODUCT for control of 2-3" sicklepod, purslane, pigweed, cutleaf ground cherry, and common ragweed.</li> <li>Apply THIS PRODUCT at 5.3 fl. oz./A plus 0.2 lb. active ingredient per acre of a 2,4-D formulation for control of 2-4" grasses in mixture with common cocklebur, morningglory, and red rice.</li> <li>Always refer to the 2,4-D label for weeds controlled, rates of applications, directions for use, limitations, and restrictions</li> <li>Do not graze or harvest for forage or hay.</li> <li>If necessary, make a second and final application 7-14 days later.</li> <li>HODED OR SHIELDED SPRAYERS</li> <li>Apply by directing spray between the rows and using hooded or shielded sprayers to prevent spray contact with crop plants.</li> <li>Use higher rate on larger (less than 6") or hard to control weeds. Weeds 6" or taller may not be controlled.</li> <li>Severe damage and/or complete kill can occur if spray intentionally or accidentally (including drift of fine droplets) contacts the plants.</li> <li>Di not treat on soybeans that are less than 8" tall.</li> <li>Use precision directed spray application equipment adjusted so that no more than the lower 3" of the soybean plant is contacted by the application spray.</li> <li>Do not exceed 30 psi nozzle pressure or spray under conditions which may cause excessive drift.</li> <li>Some crop injury will occur. The degree of injury is dependent upon the precision of application and spraying conditions.</li> </ul>
SOYBEANS	Harvest Aid	5.4-10.7 fl. oz.	Ground: 20 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Indeterminant varieties: Applications should be made when at least 65% of the seed pods have reached a mature brown color or when seed moisture is 30% or less. Determinant varieties: Apply when plants are mature, i.e., beans are fully developed, 1/2 of leaves have dropped, and remaining leaves are yellowing.</li> <li>Injury will occur on immature soybeans.</li> <li>Mature cocklebur, especially drought-stressed plants, are tolerant to THIS PRODUCT and desiccation will not be complete. Always use the higher rate when treating cocklebur.</li> <li>Do not apply within 15 days of harvest.</li> <li>Do not graze or harvest for forage or hay.</li> </ul>
STRAWBERRIES	Postemergence Directed Spray	1.3 pts.	Ground: 20 gals.	21	<ul> <li>Do not make more than 3 applications per year.</li> <li>Direct spray between the rows using shields to prevent spray contact with crop plants.</li> <li>Do not allow spray to contact strawberry plants as injury or excessive residues may result.</li> <li>Do not apply more than 3 times per season.</li> <li>Do not graze livestock in treated areas.</li> </ul>
SUGAR BEETS	Preplant or Preemergence	1.3-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>For heavier weed infestations, use the higher label rate.</li> <li>Seeding or transplanting should be done with a minimum amount of soil disturbance.</li> <li>Crop plants emerged at time of application will be killed.</li> <li>Can be used in fallow bed/stale seedbed for weed control.</li> <li>Seedbeds or plantbeds should be formed as far ahead of treatment as possible to permit maximum weed emergence.</li> </ul>

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
SUGARCANE	Postemergence Directed Spray (includes Hooded or Shielded)			-	<ul> <li>Use Comments</li> <li>Do not make more than 2 applications per year, except applications made by air in Florida and Texas in which the maximum number of applications allowed is 1 per year.</li> <li>Apply as a hooded, shielded or directed spray to avoid contact with cane foliage to prevent leaf burn and yield reduction.</li> <li>If necessary, a second and final application can be made when new weed growth is 2-6" high.</li> <li>Do not graze treated areas or feed treated forage to livestock.</li> </ul>
—Florida—		1.3 pts.	Ground: 50 gals.	-	<ul> <li>Do not make more than 2 applications per year.</li> <li>Optimum results can be obtained by applying in early spring (March-April) when weeds are small.</li> <li>Do not apply after June 1 as cane growth may be stunted and yields reduced.</li> </ul>
—Hawaii—		1.3 pts.	Ground: 20 gals.	-	Do not make more than 2 applications per year.     Do not apply after cane rows have closed in.
Louisiana		0.7-2.0 pts.	Ground: 20 gals.	30	<ul> <li>Do not make more than 2 applications per year.</li> <li>For tiller control, apply when tillers are less than 18" high.</li> <li>For heavier weed infestations or tiller growth use the higher rate.</li> </ul>
-Florida & Texas	Harvest Aid	0.4-0.7 pts.	Air: 5 gals.	-	<ul> <li>Do not make more than 1 application per year.</li> <li>Under cool, cloudy weather conditions use higher rate.</li> <li>Apply 3-14 days before burning and harvest.</li> </ul>
SUNFLOWER	Preplant or Preemergence Broadcast or Banded Over Row	1.7-2.7 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Apply before, during, or after planting but before crop emergence.</li> </ul>
SUNFLOWER	Preharvest Desiccation Broadcast	0.8-1.3 pts.	Ground: 10 gals. Air: 5 gals.	7	<ul> <li>Do not make more than 2 applications per year.</li> <li>Apply when sunflower seeds reach physiological maturity (when seed moisture is 35% or lower). For many varieties, this is equivalent to the time when the back of the heads are yellow and the bracts are turning brown.</li> <li>Do not graze treated areas or feed treated forage to livestock.</li> <li>When crop stands or weed infestations are heavy, use the higher label rate.</li> </ul>
TARO, DRYLAND (Hawaii Only)	Postemergence Directed Spray	1.3-2.1 pts.	Ground: 10 gals.	180	<ul> <li>Do not make more than 2 applications per year.</li> <li>Do not allow spray to contact the taro plants as injury may result.</li> <li>Make the first application when weed growth is 1-4" high.</li> <li>Weeds emerging after the application will not be controlled.</li> <li>A single re-treatment may be made; however, do not harvest dryland taro within 6 months of the last application.</li> </ul>
TREE PLANTATION ESTABLISHMENT Deciduous and Conifers	Preplant Broadcast	1.3-2.7 pts.	Ground: 20 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>To allow maximum emergence of weeds prepare ground early.</li> <li>Apply prior to planting. Plant with minimal soil disturbance.</li> <li>For heavier weed infestations, use the higher application rate.</li> <li>For improved burndown or residual control, tank mix THIS PRODUCT with other herbicides labeled for this use.</li> <li>Always refer to the specific tank mix herbicide label(s) for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> <li>Do not apply in less than 20 gals./A as weed control will be reduced.</li> </ul>

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
TREES AND VINES Orchards Vineyards Windbreak, Shade & Ornamental Trees: Acerola Apples Apples Apricots Avocados Bananas Beechnut Brazil nut Butternut Calamondin Cashew Cherries Chestnut Chinquapin Citrus Chestnut Chinquapin Citrus Citron Coffee Figs Filberts Grapefruit Grapes Hickory nut Kiwi fruit Kumquat Lemon Lime Macadamia nuts Mandarin Nectarines Olives Orange (sour & sweet) Papayas Peaches Plums Prunes Plums Prunes Plums Prunes Pummelo Satsuma mandarin Walnuts Other shade and ornamental trees such as arborvitae, ash, elm, fir, oak, pine, etc.	Directed Spray	1.7- 2.7 pts.	Ground: 10 gais.	Apricots 28 Cherries 28 Figs 13 Kiwi Fruit 14 Nectarines 28 Olives 13 Peaches 14 Pistachios 7 Plums 28	<ul> <li>Do not make more than 5 applications per year, except for: Apricots, Cherries, Kiwi Fruit, Nectarines, Peaches, Plums, no more than 3 applications per year, Olives, no more than 4 applications and Pistachios, no more than 5 applications but only 2 applications after shells split.</li> <li>Do not allow spray to make contact with green stems (except suckers), fruit or foliage.</li> <li>Use the shield or wrap plant when spraying around young trees or vines.</li> <li>Do not feed covered crops grown in treated areas to livestock.</li> <li>Do not apply when figs, nuts or olives to be harvested are on the ground.</li> <li>For apricots - Do not harvest within 28 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For cherries - Do not harvest within 13 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For figs - Do not harvest within 13 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For figs - Do not treat more than 3 times per year.</li> <li>For mature woody weeds, perennial weeds, late geminating weeds and green suckers, netreatment or spot treatment may be necessary.</li> <li>For nectarines - Do not harvest within 13 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For nectarines - Do not harvest within 13 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For nectarines - Do not harvest within 14 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For nectarines - Do not harvest within 13 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For nectarines - Do not harvest within 14 days after application and do not exceed 3 postemergence directed applications per season.</li> <li>For pistachios - Do not exceed 2 applications per season.</li> <li>For pistachios - Do n</li></ul>

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
TREES AND VINES Tank Mixes	Directed Spray	1.7-2.7 pts.	Ground: 10 gals.	Always refer to other Tank Mix labels	<ul> <li>Do not make more than 5 applications per year, except for: Apricots, Cherries, Kiwi Fruit, Nectarines, Peaches, Plums, no more than 3 applications per year; Olives, no more than 4 applications and Pistachios, no more than 5 applications but only 2 applications after shells split.</li> <li>This product may be tank mixed with registered residual herbicides listed below for combined emerged and residual weed control. THIS PRODUCT may be tank mixed with the following herbicides: Devrinole Herbicide Goale Karmexe Krovare Herbicides Princepe Sinbare Solicame Herbicide</li> <li>Always refer to other herbicide labels for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>
TYFON (New Hampshire only)	Preplant Preemergence	1.7-2.7 pts.	Ground: 10 gals.	-	<ul> <li>Do not make more than 3 applications per year.</li> <li>Seeding should be done with a minimum of soil disturbance.</li> <li>Weeds and grasses emerging after treatment will not be controlled.</li> <li>Crop plants emerged at time of application will be injured.</li> </ul>
VEGETABLES (Seeded or Transplanted) Beans (Lima, Snap) Broccoli Cabbage Cantaloupe Cartots Cauliflower Chayote fruit Chinese cabbage Chinese waxgourd Citron melon Collards Cucumber Eggplant Gherkin Gourd, Edible Groundcherry Lettuce Momordica spp. Musk melons Peas Pepino Peppers Pumpkin Squash Sweet Corn Tomatillo Turnips Tomatoes Watermelons	Preplant Preemergence	1.3-2.7 pts.	Ground: 10 gals. Air: 5 gals.		<ul> <li>Do not make more than 3 applications per year.</li> <li>Seedbeds or plantbeds should be formed as far ahead of treatment as possible to permit maximum weed emergence.</li> <li>Banded or broadcast treatment applications can be made before, during or after planting but prior to the crop emergence.</li> <li>For heavier weed infestations, use the higher rate.</li> <li>Seeding or transplanting should be done with a minimum amount of soil disturbance.</li> <li>Crop plants emerged at time of application will be killed.</li> <li>THIS PRODUCT can be used in fallow bed/stale seedbed for weed control alone or tank mixed with Goals. Always refer to the Goal label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> <li>Do not harvest tomatoes within 30 days after application.</li> </ul>

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THIS PRODUCT Crop **Use Pattern Minimum Total** Grazing or Additional Precautions, Restrictions and Directions **Rate Per Acre Spray Per Acre** Preharvest Interval (Days) VEGETABLES **Directed Spray** · Do not make more than 3 applications per year. 1.3 pts. Ground: 10 gals. · For control or suppression of emerged weeds between rows after crop Eggplant establishment. Peppers · Use precision directed spray application equipment adjusted to prevent Tomatoes spray contact with crop plants. Do not exceed 30 psi nozzle pressure. Do not spray under conditions which may cause excessive drift. · Apply when weeds are succulent and weed growth is less than 6". · Do not apply more than 3 applications per season. · Do not allow animals to graze in treated areas. · Do not harvest tomatoes within 30 days after application. VEGETABLES After Final 1.6-2.5 pts. Ground: · Do not make more than 2 applications per year. Harvest 40 -120 gals. Apply in 40-120 gallons of water per acre (0.62-0.93 lb. a.i./A). Add NIS containing 75% or more surface active agent at 0.125 v/v (1 pt./100 Tomatoes gals. spray solution). · To ensure maximum herbicide burndown, tomato vines should be thoroughly covered. · THIS PRODUCT may be deactivated and less efficacious when dirty or muddy water is used. . To aid in the removal of sweet potato whitefly, burn tomato vines with propane burners as soon as possible after the vines have dried down sufficiently. · DO NOT apply more than a total of 3 lbs. active ingredient (paraquat) per acre per season. · To minimize drift, do not use nozzles or nozzle configurations which produce fine spray droplets (mist). VEGETABLES Broadcast 0.4-0.7 pts. Ground: · Do not make more than 2 applications per year. 10 gals. · For control of volunteer barley in preformed seedbeds. (California, · Do not harvest tomatoes within 30 days after application. Washington, Oregon, Air: 5 gals. Idaho only) Lettuce Melon Sugar Beets Tomatoes VEGETABLES 1.7-2.7 pts. Ground: · Do not exceed 2 applications per year. Dormant -10 gals. · Apply during dormant season before buds in crown begin to grow. Rhubarb

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# **RESIN SOAKING**

35 39

Pines including Loblolly, Shortleaf, Longleaf, Slash, Virginia, Pond, Pitch, and Spruce Pines.

**Tree Selection** -Trees should be selected from stands on sites not subject to stress from periods of extreme drought stress because the desiccating effect of THIS PRODUCT is accentuated during drought, causing a reduction in the amount of oleoresin deposited in the xylem. Vigorous, non-stagnated natural or planted stands should be selected. Plan THIS PRODUCT treatments in stagnated or commercial timber stands, not sooner than three years after a commercial thinning.

Application Directions: To bring the treatment into contact with sapwood (or xylem), apply water-diluted THIS PRODUCT to an appropriate wound in the tree trunk.

**Bark Streaks or Cuts:** Use a standard or rotary bark hack or a chainsaw shipping tool (used in naval stores work) to remove a single 1-inch wide streak of bark about 1-2 ft. from ground level. Do not exceed 1/3 of the circumference of the tree. Serious girdling of the trunk and premature death of the tree can result if multiple streaks or cuts are made. Apply a coarse spray (about 1.7-5.0 ml) THIS PRODUCT solution (1-5% cation, wt./wt. basis) to runoff to the exposed xylem, using a low-pressure sprayer. The amount of spray required per cut depends on tree circumference and the length of cut or streak. For example, for a 9-inch diameter tree, using 3 ml of 2 or 4% THIS PRODUCT solution will cover the 1-inch wide streak and will result in application of 60 or 120 mg per streak.

Time of Treatment: Less severe pine beetle infestation and longer tree life usually result during cool season treatments under non-drought seasons. However, resin soaking can occur from treatments made any time of the year.

Interval between Treatment and Tree Harvest: There should be at least a 6-month interval between application of THIS PRODUCT and tree harvest. However it is preferable the interval is from 12-24 months, even though intervals of over 6 months may not be possible under conditions of drought or serious pine beetle attacks possibly making early harvest necessary.

With this treatment, there is a potential for promoting beetle attack or causing premature death of the tree. At high dosage rates, desiccation of the xylem tissue, rather than the desired resin soaking, may occur.

Note: This type of treatment may reduce stem growth during between treatment and tree harvest.

Dilution Table for THIS PRODUCT (3.0 lbs. cation per gallon)				
Concentration of Cation Desired (wt./wt. basis)	Add the Following No. Gal. of Water to 2/3 Gallon of THIS PRODUCT			
0.2%	118.8			
0.5%	46.8			
1.0%	22.9			
2.0%	10.9			
3.0%	6.9			
4.0%	4.9			
5.0%	3.7			

**Use Pattern** THIS PRODUCT **Minimum Total** Grazing or Additional Precautions, Restrictions and Directions Crop **Rate Per Acre** Spray Per Acre Preharvest Interval (Days) CONSERVATION · Do not make more than 3 applications per year. Broadcast 1.7-2.7 pts. Ground: RESERVE, FEDERAL THIS PRODUCT may be tank mixed with other herbicides 10 gals. SET-ASIDE, registered for this use for improved emerged weed control or CONSERVATION extended weed control. Always refer to tank mix herbicide labels for Air: 5 gals. COMPLIANCE weeds controlled, rates of applications, directions for use, PROGRAMS (For use in limitations, and restrictions. compliance with the Federal Conservation Reserve Program or Federal set-aside programs) NONCROP USES · Repeat applications as necessary but do not make more than 10 Broadcast or 1.7-2.7 pts. Ground: applications per year. 10 gals. Spot Treatment · To be used in noncrop areas including public airports, electric transformer stations, pipeline pumping stations, around commercial buildings, storage yards and other installations, and fence lines. · Avoid spray contact with the foliage of ornamentals or desired plants. PASTURE RESEEDING · Do not make more than 3 applications per year. Broadcast 0.7-1.3 pts. Ground: See specific 10 gals. geographic West of Cascade and Sierra Nevada Mountains · Apply in October through December after first fall rains and after recommendation For suppression of existing sod and undesirable Air: 5 gals. weeds have emerged and sod has started new growth. emerged broadleaf weeds · Apply on moderately to heavily grazed areas for best seeding and grasses prior to or at results. time of planting grasses or · Do not use in heavy sod and weed growth areas. East of Rocky Mountains forage legumes · Use the 1.3 pts rate on vigorous or coarse sod species such as bromegrass. · Apply prior to, or at time of seeding grasses or forage legumes. · Apply only to grazed or mowed pastures not more than 3" in height at time of treatment. Bermudagrass or Bahiagrass Sods · Apply in late summer or early fall to sod not exceeding 3" in height. · For control of emerged little barley, apply in February or March before the mid-boot stage of little barley. Bermudagrass and Coastal Bermudagrass Pastures · Apply when bermudagrass is dormant. · For control of little barley, apply before the mid-boot stage. · Do not mow for hay until 40 days after treatment. 0.7-1.3 pts. Broadcast Ground: · Do not make more than 2 applications per year. For control of followed by 0.7-10 gals. · Use split applications of 10-21 days apart if necessary. endophyte-fungus-infected (Split • Do not exceed 2.6 pts./A total in preparation for reseeding. Application) 1.3 pts. fescue forage . For spring plantings, the initial application of 0.7-1.3 pts. may be legume/grass mixture and made the previous fall. other grass pastures · Apply when fescue is actively growing and no more than 4" high. . To reduce the infestation of endophyte-infested grass, do not allow fescue to go to seed starting with the preceding year's crop.

Сгор	Use Pattern	THIS PRODUCT Rate Per Acre	Minimum Total Spray Per Acre	Grazing or Preharvest Interval (Days)	Additional Precautions, Restrictions and Directions
*For prickly pear desiccation in pastures. *Not for use in California	Spot Sprays	0.8 fl. oz. per gallon of water	Spray to wet weed foliage	-	<ul> <li>Do not make more than 10 applications per year.</li> <li>Hand-held equipment such as knapsacks backpack sprayers, pump-up pressure sprayers, hand-guns, and hand-wands, can be used to direct the spray onto weed foliage so that the spray thoroughly wets foliage.</li> <li>Mix 0.8 fl. oz. of THIS PRODUCT and 1/3 fl. oz. of a nonionic surfactant per gallon of water.</li> <li>Completely and uniformly cover all green prickly pear foliage with spray.</li> <li>Apply in May through September for best desiccation results.</li> <li>Do not use more than 1.6 pts. of THIS PRODUCT per acre per year.</li> <li>Apply only to pastures with no more than 3" of height at time of treatment.</li> <li>Tank mix with Grazon<sub>8</sub> P+D Specialty<sub>6</sub> herbicide at a rate of 1-2 fl. oz. per gallon of water for improved desiccation and perennial control of prickly pear.</li> <li>Always refer to the Grazon P+D Specialty herbicide label for weeds controlled, rates of applications, directions for use, limitations, and restrictions.</li> </ul>
*For Juniper Species leaf moisture reduction or desiccation prior to Prescribed burning of pastures. *Not for use in California	Broadcast	1.3 pts.	Air: 5 gals.	-	<ul> <li>Do not make more than 10 applications per year.</li> <li>Use only in conjunction with prescribed burning as recommended and monitored by local SCS or University and Extension Range Specialists.</li> <li>Apply during hot, dry weather conditions (generally July and August).</li> <li>Use 2% v/v nonionic surfactant in a minimum of 5 gal spray solution.</li> <li>Monitor juniper leaf moisture content. Maximum leaf moisture reduction generally occurs 3-4 weeks after THIS PRODUCT application.</li> <li>Significant soil moisture and/or wet weather conditions prior to or after application will decrease the potential for juniper crown burns.</li> <li>Reduction in leaf moisture can be adversely affected by cool or humid weather conditions</li> <li>Do not graze livestock after application or prior to burning.</li> </ul>
*Native Pastures *Not for use in California	Broadcast	1.0-1.25 pts.	Ground: 10 gals. Air: 5 gals.	-	<ul> <li>Do not make more than 2 applications per year.</li> <li>Apply THIS PRODUCT for control of downy and Japanese brome.</li> <li>Apply in spring after 90% node formation of brome species, but before full bloom.</li> <li>Emerged native perennial grasses will be burned by application, but application after 90% node formation will allow adequate time for native grasses to recover and attain maximum growth in the use season.</li> <li>Do not apply more than 1.25 pts. THIS PRODUCT per year.</li> <li>Apply only to pastures with no more than 3" of height at time of treatment.</li> </ul>

Conversion Table THIS PRODUCT to Be Applied						
Ounces	Pints	Lb. a.i.	Acres/Gallon			
2.5	0.16	0.06	51.3			
4.8	0.30	0.11	26.7			
5.28	0.33	0.12	24.2			
5.52	0.35	0.13	23.2			
10.00	0.63	0.23	12.8			
11.00	0.69	0.26	11.6			
11.20	0.70	0.26	. 11.4			
12.00	0.75	0.28	10.7			
16.00	1.00	0.38	8.0			
20.00	1.25	0.47	6.4			
20.80	1.30	0.49	6.2			
24.00	1.50	0.56	5.3			
28.00	1.75	0.66	4.6			
32.00	2.00	0.75	4.0			
40.00	2.50	0.94	3.2			
43.20	2.70	1.00	3.0			

# STORAGE AND DISPOSAL

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

**Pesticide Storage:** Store in original container and place in a locked storage area. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings. Store at temperatures above 32°F. For Emergencies involving a Spill, Leak, Fire, Exposure, or Accident, contact: CHEMTREC at (800) 424-9300.

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

# CONTAINER DISPOSAL:

# 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.

# WARRANTY - CONDITIONS OF SALE

Seller warrants that this product conforms to the chemical description and is reasonably fit for purposes stated on the label when used in accordance with the directions and instructions under normal conditions of use; but neither this warranty nor any other warranty of merchantability or fitness for a particular purpose, express or implied, extends to the use contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and to the extent consistent with applicable law, buyer assumes the risk of any such use.

> Manufactured For: Drexel Chemical Company P.O. BOX 13327, MEMPHIS, TN 38113-0327

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