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Systems Integration Group, Inc.

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9779 - 297 UNIT ) STATES ENVIRONMENTAL PROTECTION ACT  $\gamma\gamma$ 

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# MAY 14 1999

05/14/99

CERTIFIED MAIL

Mr. Don O'Shaughnessy Manager, Product Registration TERRA INDUSTRIES INC. 600 Fourth Street, P. O. Box 6000 Sioux City, IA 51102-6000

Dear Mr. O'Shaughnessy:

Reregistration Subject: Label Revisions-Prometryne 4L Herbicide BPA Registration No. 9779-297 Your Submission Dated November 12, 1996

The product labeling referred to above, submitted in connection with reregistration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you make the required changes listed below:

1. The "Statement of Practical Treatment" should be placed directly under the header "Precautionary Statement and revise "If Swallowed" and "If On Skin" to read as follows:

"IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger, or if available by administering syrup of ipecac. If person is unconscious, do not give anything by mouth and do not induce vomiting."

"IF ON SKIN: Wash with plenty of soap and water. Get medical attention."

Change the "Hazards to Human & Domestic Animals Statement to 2. read as follows:

"Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet."

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|---------|---|--------------|---|-------------|--|--|
| SYMBOL  | • | 7505C        |   |             |  |  |
| SURNAME | ٠ | MINOR, E.    |   |             |  |  |
| DATE    | ٠ | May 12, 1999 |   |             |  |  |

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

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3. Under the PPE requirements "change the dust/mist filtering respirator statement to:

"For exposures outdoors, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TX-21C), or a NIOSH approved respirator with any R, P of HE filter. For exposures in enclosed areas use a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticide (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister 14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE prefilter."

- 4. The User Safety Recommendations must be completely boxed in to separate and highlight the text. The statement "Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet." is no longer a recommendation since it is required in the precautionary statements.
- 5. The Storage and Disposal Statement should be completely boxed.
- 6. A sub-header "General Instructions and Information" should be placed directly after the "Storage and Disposal box".
- 7. Place the "Chemigation/Prohibition statement directly below the sub-header "General Instructions and Information".
- 8. The "Aerial Spray Drift" labeling must be moved to the "Directions for Use" and placed directly under the "Chemigation/Prohibition" section and include the following sentences: "Where states have more stringent regulations, they should be observed". "The applicator should be familiar with and take into account the information covered in the <u>Aerial Drift Reduction Advisory Information</u>."
  - In addition under "Swath Adjustment" the first statement, "When applications are made with a crosswind, the swath will be displaced <u>down wind</u>." instead of downward.
- 9. "General Information" should be placed directly under the "Spray Drift" labeling and should include:

"PROMETRYNE 4L is.....at selective rates."
"When applied before.....better weed control."
"When applied to.....the rate applied."
"Following many years.....for specific recommendations."
"Equipment and Missing:....clogging may result."
"Use conventional spray....mixture in suspension."
"Nozzles:.....18 inches tall."
"Mixing: (1)Fill.....a uniform suspension."

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"Cleaning: Wash sprayer.....to these crops." "Seedbed Preparation- To insure.....rows as the planter." "Band Treatment: For band treatment....."

10. Add to the label a section entitled "General Precautions and Restrictions" directly below the "General Information Section and include the following:

"FAILURE TO FOLLOW PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR PERFORMANCE, AND/OR ILLEGAL RESIDUES."

11. Add to the label a sub-header "Application Instructions" Place the sub-header directly following "General Precautions and Restrictions" section and be placed in the center just above the site <u>COTTON</u>.

See enclosure for additional information as to what your label should look like.

Submit the labeling reflecting the above outlined changes to the Agency for review within thirty (30) days of receipt of this letter. Failure to do so will result in issuance of a Notice of Intent to Suspend your product's registration.

Sincerely

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James A. Tompkins

Product Manager (25) Herbicide Branch 7505C

Enclosures

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# **PROMETRYNE 4L HERBICIDE**

For selective weed control in cotton and celery (FOR AGRICULTURAL OR COMMERCIAL USE ONLY; NOT FOR USE BY HOMEOWNERS)

| ACTIVE INGREDIENTS                      |       |        |
|-----------------------------------------|-------|--------|
| Prometryne: 2,4-bis (isopropylamino)-6- |       |        |
| (methylthio)-s-triazine                 |       |        |
| INERT INGREDIENTS                       |       |        |
|                                         | TOTAL | 100.0% |

PROMETRYNE 4L contains 4 lbs. active ingredient per gallon.

# KEEP OUT OF REACH OF CHILDREN

# CAUTION

# STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not give anything by mouth to an unconscious person. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF IN EYES: Flush with plenty of water for 15 minutes. Get medical attention.

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IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

# SPRAY DRIFT:

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

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

- 1. The distance of the 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 degrees.

More stringent regulations should be observed in the states requiring them.

EPA Reg. No. 9779-297

**RIVERSIDE/TERRA CORPORATION** 

P.O. Box 6000, Sioux City, Iowa 51102-6000

Riverside Serves Agriculture. Agriculture Serves Everyone.

Manufactured For

Read Additional PRECAUTIONARY STATEMENTS. ACCEPTED with COMMENTS In EPA Letter Dated MAY 1 3 1999

> Under the Federal Insecticide, Fundicide, and Rodenticide Act as amended, for the peaticide registered under EPA Reg. No. 2779 - 155

EPA Est. No. 9779 AR-13 NET CONTENTS GALS. 9/K08/6

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# PRECAUTIONARY STATEMENTS CAUTION HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, absorbed through skin, or inhaled. Avoid breathing vapors or spray mist. Avoid contact with eyes, skin, or clothing. The area being treated must be vacated by unprotected persons.

# PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves, shoes plus socks. In addition, mixers and loaders supporting aerial application must wear, chemical-resistant apron and a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

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

# ENVIRONMENTAL HAZARDS

Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas.

# DIRECTIONS FOR USE

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

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

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 regulations.

# AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours for celery and 12 hours for all other crops.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls over long-sleeved shirt and long pants, chemical-resistant gloves and shoes plus socks.

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# STORAGE AND DISPOSAL DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL.

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# STORAGE

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Store in a dry location away from children, animals, foods, feeds, seeds, or other agricultural chemicals. Handle in accordance with information given under PRECAUTIONARY STATEMENTS. In the event of spillage or leakage, soak up material with absorbent clay, sand, sawdust or other absorbent material. Scrape up and dispose of in accordance with information given under DISPOSAL. Repackage and relabel useable product in a sound container. In case of fire or other emergency, report at once by toll-free telephone to 800-424-9300.

# DISPOSAL

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

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

### GENERAL INFORMATION

PROMETRYNE 4L is a selective herbicide that may be applied either before or after weeds emerge for control of most annual broadleaf weeds and grasses, including groundcherry, lambsquarters, malva, annual morningglory, mustard, black nightshade, pigweed (carelessweed), purslane, Florida pusley, ragweed, smartweed, teaweed (prickly sida), barnyardgrass (watergrass), crabgrass, foxtail, goosegrass, junglerice, Panicum spp., signalgrass (and other Brachiaria spp.), and wild oats. PROMETRYNE 4L also controls shallow-germinating seedlings of cocklebur, coffeeweed, and sandbur. It does not control johnsongrass, bermudagrass, other established perennials, or sprangletop at selective rates.

When applied before weeds emerge, PROMETRYNE 4L enters weeds through their roots. Thus, its effectiveness depends on moisture to move it into the soil. Under very dry soil conditions after application, a shallow cultivation or rotary hoeing will generally result in better weed control.

When applied to emerged weeds, PROMETRYNE 4L provides foliar knockdown and/or residual control of later germinating weeds, depending on the rate applied.

Following many years of continuous use of this product and chemically related products, biotypes of some of the weeds listed on this label have been reported which cannot be effectively controlled by this and related herbicides. Where this is known or suspected, we recommend the use of this product in combination with other registered herbicides which are not triazines. Consult with your State Agricultural Extension Service for specific recommendations.

FAILURE TO FOLLOW PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR PERFORMANCE, AND/OR ILLEGAL RESIDUES.

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### SPRAY DRIFT ADVISORY

#### Information on Droplet Size

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

# **Controlling Droplet Size**

- Volume Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows
  produce larger droplets.
- Pressure Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types lower pressure
  produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing
  pressure.
- Number of nozzles Use the minimum number of nozzles that provide uniform coverage.

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- Nozzle Orientation Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than
  other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and
  increase drift potential.
- Nozzle Type Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray
  angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce
  the largest droplets and the lowest drift.

#### Boom Length

For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan or rotor length may further reduce drift without reducing swath width.

#### Application Height

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

#### Swath Adjustment

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

#### Wind

Drift potential is lowest between wind speeds of 2-10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should 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 should 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 smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates are inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

#### Sensitive Areas

The pesticide should 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).

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#### Equipment and Mixing

Thoroughly clean sprayer prior to use. Do not use a sprayer contaminated with 2, 4-D or other materials, as crop damage or sprayer clogging may result.

Use conventional spray equipment with hydraulic or mechanical agitation except in California and Arizona where only mechanical agitators are recommended. Screens in nozzles and in suction and in-line strainers should be no finer than 50-mesh. Use a pump with capacity to maintain 35-40 psi at the nozzles. If hydraulic agitation is used, the pump should also provide sufficient agitation in the tank to keep the mixture in suspension.

Nozzles: For preplant incorporated or preemergence application, use flat fan nozzle tips. For postemergence band application, use offcenter nozzle tips. For postemergence broadcast application, use flat fan or off-center nozzle tips. Use flood nozzle tips only in Arizona and California for lay-by treatment in cotton at least 18 inches tall.

Mixing: (1) Fill spray tank ½ to ¾ full with clean water. (2) Start agitation. (3) Pour the product directly from the container into the spray tank partially filled with water, and then add the rest of the water. (4) Provide agitation during mixing and application to maintain a uniform suspension.

Cleaning: Wash sprayer thoroughly with clean water immediately after use. Do not use the same sprayer on sensitive crops, as even small residues of PROMETRYNE 4L in the tank may cause injury to these crops.

# Seedbed Preparation

To insure proper placement of PROMETRYNE 4L, seedbeds must be well prepared and as free as possible from trash and clods. A firm seedbed is best for obtaining effective weed control. Uniformity in height and width of seedbed is essential for proper postemergence applications of PROMETRYNE 4L. Beds should be low and flat. Take care to avoid planter marks. Wide planter packing wheels or rollers are recommended. Wheel furrows should be uniform in depth. Mount the sprayer so that it follows the same rows as the planter.

#### Band Treatment

For band treatment, calculate the amount of PROMETRYNE 4L needed by the formula:

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| Band width in inches | x | broadcast rate | = | amount needed per |
|----------------------|---|----------------|---|-------------------|
| row width in inches  |   | per acre       |   | acre of field     |

### COTTON

PROMETRYNE 4L may be applied preplant incorporated or preemergence and/or postemergence as recommended in the following tables. The postemergence applications may follow preplant incorporated or preemergence treatments of PROMETRYNE 4L.

Apply PROMETRYNE 4L in a minimum of 20 gals, of water per acre as broadcast or band application at the rates indicated in the following tables. Do not use on glandless cotton varieties as crop injury will occur. Note: Do not feed treated forage to livestock, or graze treated areas.

### Preplant Incorporation (Arizona, California, and New Mexico)

Apply PROMETRYNE 4L at the appropriate rate in Table 1 as a broadcast or band treatment. If broadcast, treat the flat soil surface prior to listing. If banded, apply over partially finished or finished beds. Incorporate up to 4 inches deep immediately after application with PTO-driven equipment, double disk, rolling cultivator, or bed conditioner.

Table 1: Preplant Incorporation

| Region                                 | Soil Texture                | Broadcast rate per acre |
|----------------------------------------|-----------------------------|-------------------------|
| Arizona, California,<br>and New Mexico | sand, loamy sand            | Do not use.             |
|                                        | sandy loam (AZ & CA only)   | 2.4 to 3.2 pts.         |
|                                        | sandy loam, loams (NM only) | 3.2 pts.                |
|                                        | silt loam, clay             | '4.8 pts.'              |

Precautions: Do not use PROMETRYNE 4L in cut areas of newly leveled fields, in areas of excess sait, or in areas where theorems over the beds is likely to occur or crop injury may result. Do not plant cotton in tractor wheet depressions as crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established. In New Mexico, apply either preplant incorporated or preemergence (not both)—see Preemergence section.

PROMETRYNE 4L may be applied aerially and preplant incorporated for weed control in furrow-irrigated cotton (except California).

Use aerial application only where broadcast applications are specified. Apply in a minimum of 5 gallons per acre of total spray. Avoid applications under conditions where uniform coverage cannot be obtained or where excessive spray drift may occur. To assure that spray will be controllable within the target area when used according to label directions, make applications at a maximum height of 10

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feet using low drift nozzles at a maximum pressure of 40 psi, and restrict applications to periods when wind speed does not exceed 10 mph. To assure that spray will not adversely affect adjacent sensitive non-target plants, apply PROMETRYNE 4L by aircraft at a minimum upwind distance of 400 feet from sensitive plants.

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Avoid applications to humans or animals. Flagmen and loaders should avoid inhalation of spray mist and prolonged contact with skin.

#### Preemergence

Apply at planting or shortly after planting at the appropriate rate in Table 2. PROMETRYNE 4L may be used on cotton planted flat, on beds, or in furrows. To avoid concentration of PROMETRYNE 4L in the seed furrow, do not make broadcast applications to cotton planted in furrows deeper than 2 inches. Band applications may be made by cotton planted in furrows deeper than 2 inches, but band width should not exceed the width of the bottom of the furrow. If banded, do not cover treated bands with soil while cultivating untreated row middles. Do not use on sand or loamy sand, on shallow soils with caliche subsoils, or in areas with caliche outcroppings.

Cotton may be replanted in soil previously treated with PROMETRYNE 4L. Do not apply a second preemergence application of PROMETRYNE 4L or injury may occur.

| Region                                                                                            | Soil Texture                 | Broadcast rate per acre |
|---------------------------------------------------------------------------------------------------|------------------------------|-------------------------|
| Mid-South and Southeast<br>other than Mississippi<br>River Delta in Mississippi                   | sandy loam                   | 3.2 to 4 pts.           |
|                                                                                                   | silt and clay loam           | 4.8 pts.                |
|                                                                                                   | Sharkey clay (Arkansas only) | 5.6 pts.                |
| Mississippi River Delta in Missippi                                                               | sandy loam                   | 4 to 4.8 pts.           |
|                                                                                                   | silt and clay loam           | 5.6 pts.                |
|                                                                                                   | Sharkey clay                 | Do not use              |
| Blacklands of Texas and Okla., Texas Gulf<br>Coast, and Texas Coastal Bend                        | loam                         | 2.4 pts.                |
|                                                                                                   | clay                         | 4.8 pts.                |
| Rio Grande Valley of Texas*                                                                       | loam                         | 3.2 pts.                |
|                                                                                                   | clay                         | 4.8 pts.                |
| High Plains, Rolling Plains and Edwards<br>Plateau of Texas, South-west Texas and<br>New Mexico** | sand, loamy sand             | Do not use              |
|                                                                                                   | sandy loam                   | 1.6 pts.                |
|                                                                                                   | loam, sandy clay loam        | 2.4 pts.                |
|                                                                                                   | other clay soils             | 3.2 pts.                |
| Arizona and California                                                                            | Do Not Use                   |                         |

\*Rio Grande Valley of Texas-Furrow irrigation cotton- If adequate rain does not fall soon after application, a shallow cultivation will insure good weed control.

\*\*New Mexico-Apply either preplant incorporated or preemergence (not both)-See Preplant Incorporation section.

Winter Weed Control In Texas

For control of winter weeds only, such as henbit (purpletop) and seedling dock on fall bedded cotton land in the Texas Gulf Coast and Blacklands of Texas, apply 1.2-1.6 pts. of PROMETRYNE 4L per acre in the fall or winter to land that will be planted to cotton the following spring. For best results, apply before weeds emerge. PROMETRYNE 4L will give effective control of emerged henbit if applied before it reaches 4-6 inches tall. For postemergence henbit control, add a suitable surfactant at 0.5% of spray volume or an emulsifiable oil at 1.0% of spray volume to the spray mix.

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### Postemergence Directed

Be especially careful in applying PROMETRYNE 4L postemergence to prevent contact of the spray with cotton leaves, or injury may occur. Use precision application equipment so the spray is accurately directed to the base of the cotton plants and still thoroughly covers the soil and weeds beneath the cotton plants. Apply during calm periods to prevent drift. Use leaf lifters or shields if leaf contact cannot be avoided merely by directing the spray. Apply only when all plants have exceeded the minimum recommended height. Apply to level, well prepared surfaces such as relatively clod-free beds made with bed-shapers.

Do not apply to furrow-planted cotton until furrows are leveled (plowed in).

Do not treat cotton under stress from drought, cultivator damage, or fertilizer application.

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When applying to emerged weeds, add 2 qts. of surfactant per 100 gals. of spray mixture. Use a surfactant that is compatible with 4L when applied in cotton and is approved by EPA for use on food and feed crops.

Chemical Hoe (Emerged Weeds only): Apply PROMETRYNE 4L at the appropriate rate in Table 3, two or three times if necessary. In cotton 3-6 inches tall, be extremely careful to avoid spray contact with cotton leaves by applying PROMETRYNE 4L with a precision applicator equipped with fenders or shields such as Bell Row Shield, Dickey Fenders, or W & A Fenders. In cotton less than 10 inches tall, apply only if cotton is bed or flat-planted.

Table 3: Chemical Hoe

| Height of cotton and area of use                                                         | Height of weeds    | Broadcast rate per acre |  |
|------------------------------------------------------------------------------------------|--------------------|-------------------------|--|
| 3 to б inches<br>(Arkansas, Louisiana,<br>Mississippi, Missouri,<br>Tennessee and Texas) | Less than 1 inch   | 1 pt.                   |  |
| 6 or more inches<br>(all regions)                                                        | Less than 2 inches | 1 to 1.3 pts            |  |

Lay-by (Emerged Weeds and Germinating Weeds): Apply PROMETRYNE 4L at the appropriate rate in Table 4, once per season when cotton is at least 12 inches tall (18 inches where flood nozzles are used in Arizona and California). Apply before weeds are 2 inches tall.

# Table 4: Lay-by

| Region                                                         | Soil Texture        | Broadcast rate per acre |  |
|----------------------------------------------------------------|---------------------|-------------------------|--|
| Mid-South and Southeast                                        | sandy               | 2.4 pts.                |  |
|                                                                | loam                | 2.8 pts.                |  |
|                                                                | clay                | 3.2 pts.                |  |
| Blacklands of Texas and Oklahoma                               | loam                | 1.6 pts.                |  |
|                                                                | clay                | 3.2 pts.                |  |
| High Plains of Texas and New Mexico                            | sandy               | 1.6 pts.                |  |
|                                                                | loam and clay       | 2.4 pts.                |  |
| Southwest Texas                                                | loam                | 2.4 pts.                |  |
|                                                                | clay                | 3.2 pts.                |  |
| Rio Grande Valley of Texas                                     | Do not use          |                         |  |
| Arizona and California (Do not use in the<br>Coachella Valley) | sand and loamy sand | Doinctiuse              |  |
|                                                                | sandy loam          | 2,4,10,3,2 pts.         |  |
|                                                                | loam                | 3.2 pts.                |  |

**Rotational Crops** 

The following vegetable and cover crops may be planted in the fall when PROMETRYNE 4L was applied on cotton by no more than one of these methods that year: preplant incorporated, preemergence, or only one chemical hoe treatment.

Vegetables

Cabbage, okra, onions, peas, red beets, sweet corn

Cover Crops (must be plowed down and not used for food or feed) Oats, sorghum, winter barley, winter rye, winter wheat

Spring-seeded crops in California and Arizona and spring-seeded vegetables in the Rio Grande Valley of Texas should not be planted until after April 1.

A PLANT-BACK INTERVAL (PBI) OF 8 MONTHS IS REQUIRED FOR ROTATIONAL ROOT CROPS.

# PROMETRYNE 4L COMBINATIONS FOR COTTON

Prowl<sup>®</sup> (Arizona, California, New Mexico, and the upper and lower El Paso Valley of Texas)

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This preplant incorporated tank mixture controls all weeds listed on this label and on the Prowl cotton label. Apply prior to listing or over partially finished or finished beds and incorporate immediately. Refer to the Prowl label for specific mixing, spraying, and incorporation methods. Continuous agitation in the spray tank is required to keep the material in suspension.

Apply the tank mixture with ground equipment in at least 10 gals. of water per acre at the appropriate rates from Table 5.

Table 5: Tank Mixture with Prowl

|                                  | Broadcast rate per acre |                 |  |  |
|----------------------------------|-------------------------|-----------------|--|--|
| Soil Texture                     | PROWL                   | PROMETRYNE 4L   |  |  |
| sand, loamy sand                 | Do not use              |                 |  |  |
| sandy loam                       | 1 to 1.5 pts.           | 2.4 to 3.2 pts. |  |  |
| loam                             | 1.5 to 2 pts.           | 3.2 pts.        |  |  |
| silt loam, silt, sandy clay loam | 1.5 to 2 pts.           | 3.2 to 4.8 pts. |  |  |
| clay loam, silty clay loam, clay | 1.5 to 3 pts.           | 3.2 to 4.8 pts. |  |  |

Use the high rate for each soil texture above if heavy weed populations are anticipated. Use the 3 pt. rate of Prowl for heavy clay soils.

Precautions: Do not use in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the bed is likely to occur as crop injury may result. Do not plant cotton in tractor wheel depressions or crop injury may result. Do not use this tank mixture when cotton is irrigated up as crop injury may result. On mulch planted cotton, water back only after cotton seedlings are well established.

Note: Do not feed treated forage to livestock, or graze treated areas.

Rotational Crops: If treated crop is lost, cotton may be replanted. Do not rework the soil. Refer to the Cotton section of this label for rotational crop restrictions.

Trifluralin EC Tank Mixture (Arizona, California, New Mexico and the upper and lower El Paso Valley of Texas)

This combination controls weeds listed on this label and on the Trifluralin label. This combination also controls shallow-germinating seedlings of cocklebur and coffeeweed.

Follow procedures on the Trifluralin label for soil preparation and incorporation. Apply the tank mix combination to the that shill before disking.

Pour PROMETRYNE 4L directly into spray tank one-half to three-fourths full of water, allow it to disperse with acitation, add Trifluralin EC, and then add the rest of the water. Continuous agitation in the spray tank is required to keep the material in suspension. Apply the tank mixture in at least 20 gals. of water per acre at the appropriate rates from Table 6.

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#### Table 6: Tank Mixture with Trifluralin EC

|                  | Broadcast rate per acre |                  |  |  |
|------------------|-------------------------|------------------|--|--|
| Soil Texture     | TRIFLURALIN EC PROMETRY |                  |  |  |
| sand, loamy sand | Do not use              |                  |  |  |
| sandy loam       | 1 pt.                   | 2.4 to 3.2 pts.* |  |  |
| medium soils     | 1.5 pts.                | 4 pts.           |  |  |
| fine soils       | 2 pts.                  | 4 pts.           |  |  |
| muck or peat     | Don                     | ot use           |  |  |

\*Use less than 3.2 pts. per acre only in Arizona and California

Precautions: Do not use in cut areas of newly leveled fields, in areas of excess salt, or in areas where flooding over the bed is likely to occur or crop injury may result. Do not plant cotton in tractor wheel depressions or crop injury may result. On mulch, planted cotton, water back only after cotton seedlings are well established.

Note: Do not feed treated forage to livestock, or graze treated areas.

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Rotational Crops: Cabbage, celery, okra, onions, and peas may be planted in the fall after a spring application of Trifluralin + Prometryne. Winter barley, rye and wheat can be planted in the fall if they are plowed down and not used for food or feed. Refer to the Trifluralin EC label for other directions and precautions.

# Trifluratin EC Split Application (Arizona and California)

Apply a preplant incorporated application of Triffuralin EC as directed on that label, except use the appropriate rate from Table 6. Do not apply Triffuralin EC before January 1. Follow just before planting with a preplant incorporated treatment of PROMETRYNE 4L as directed in the Cotton section of this label, except use the appropriate rate from Table 6.

Several formulations of Trifluralin are available under various trade names from several manufacturers. Observe the directions, limitations, and precautions on the label of the product used.

#### DSMA or MSMA

For faster knockdown of the weeds controlled by PROMETRYNE 4L alone, apply 1-1.3 pts. of PROMETRYNE 4L plus 3 lbs. active ingredient of DSMA or 2 lbs. active ingredient of MSMA per acre, following the same directions, precautions, and limitations as given on this label for PROMETRYNE 4L applied alone postemergence directed (chemical hoe). If needed, make a second application 1-3 weeks after the first application. Do not apply after first bloom.

Several formulations of DSMA and MSMA are available under various trade names from several manufacturers. Observe the directions, limitations, and precautions on the label of the product used.

#### CELERY

# Seedbeds (Florida)

Broadcast 1.2-1.6 pts, in a minimum of 20 gals, of water per acre after celery has 2-5 true leaves. Application may be made over the celery. Apply only after seedbed covers have been removed from seedbeds for at least one week. Apply only once per year to seedbeds.

# Direct-seeded Celery (California only)

Apply PROMETRYNE 4L at rates given below in a minimum of 20 gals. of water per acre. Within the rate ranges given, use the lower rates on coarse-textured soils and soils low in organic matter, use the higher rates on fine-textured soils and soils high in organic matter.

Preemergence: Broadcast 2.4-3.2 pts. per acre at planting or shortly after planting before celery emerges.

Postemergence: Broadcast 1.6-2 pts. per acre after celery has 2-5 true leaves. Application may be made over the celery. Apply before weeds are 2 inches tall.

To Avoid Injury to Direct-seeded Celery: (1) Make either one preemergence or one postemergence application (not both) per celery crop. (2) Do not use on sand or loamy sand. (3) Do not apply if celery is under water stress. (4) Do not apply poster ergence treatments of PROMETRYNE 4L with other pesticides. Apply only after foliar applications of other pesticides are dry. (5) Do not apply within two weeks after an application of a herbicidal oil, such as "carrot" oil.

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# Transplants

Apply one application at the appropriate rate from Table 7 in a minimum of 20 gals, of water per acre during the 2-6 week period after transplanting. Within the rate ranges given, use the lower rate on relatively coarse-textured soils and soils low in organic matter; use the higher rate on relatively fine-textured soils and soils high in organic matter. Application may be made over the celery. Apply before weeds are 2 inches tall.

# Table 7: Transplanted Celery

| State                | Soil                  | Broadcast rate per acre |  |
|----------------------|-----------------------|-------------------------|--|
| Florida              | sandy or muck         | 1.6 - 3.2 pts.          |  |
| California and Texas | coarse-textured       | 2 - 3.2 pts.            |  |
|                      | fine-textured         | 3.2 - 4 pts.            |  |
| Hawaii               | coarse-textured       | 3.2 - 4.8 pts.          |  |
|                      | fine-textured         | 4.8 - 6.4 pts.          |  |
| Michigan and Ohio    | fine-textured or muck | 2 - 4 pts.              |  |
| Wisconsin            | fine-textured         | 3.2 - 4 pts.            |  |

# Rotational Crops

The following crops may be seeded 5 months after applying no more than 4 pts. PROMETRYNE 4L per acre on celery: Cabbage, celery, corn, onions, and peas. For red beets, a plant-back interval (PBI) of 8 months is required.

Prowl® is a registered trademark of American Cyanamid Company.

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NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with directions 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 of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to Seller, and Buyer assumes the risk of any such use.