



009779-00317-050599

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Systems Integration Group, Inc.

MAY 5 1999

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:

Subject: Reregistration
Label Revisions-Prometryne + MSMA
EPA Registration No. 9779-317
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" 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."

2. Add the following statement to the Hazards to Human & Domestic Animals Statement:

"Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet."

3. Under the PPE requirements "chemical resistant footwear" must be replaced with "shoes." Change the dust/mist filtering respirator statement to:

CONCURRENCES

SYMBOL ▶	7505C							
SURNAME ▶	MINOR, E.							
DATE ▶	May 3, 1999							

"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 or 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-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. Remove the first sentence since it is required in the precautionary statements.
- 5. The Storage and Disposal Statement should be completely boxed.
- 6. A 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 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.
- 9. The "Aerial Spray Drift" labeling must be moved to the "Directions for Use" and placed directly under the "Chemigation/Prohibition" section. (see attachment 2 for language)
- 10. "General Information" should be placed directly under the "Spray Drift" labeling and should include:

"Shake well.....at one time"
 "Postemergence directed application.....and nutsedge."
 "When applied to.....of existing weeds."
 "Special care must.....relatively free of clods."
"SPRAY EQUIPMENT INFORMATION Accurate, uniform place
pressure spray equipment."
 "AGITATION:....."
 "PUMPS:....."
 "PRESSURE REGULATORS....."
 "CALIBRATION:....."
 "TANKS:....."
 "NOZZLE TIPS:....."

"STRAINERS AND SCREENS....."
 "BOOMS AND HOSES:....."
 "MIXING:....."
 "CLEANING SPRAYERS:....."

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

"Applications to cotton.....level (plowed in)."
 "Cotton under stress.....not be treated."
 "CROP ROTATION RESTRICTIONS"
 "If postemergence treatment.....until after April 1st."
 "A PLANT-PLANT BACK INTERVAL (PBI) OF 8 MONTHS IS REQUIRED FOR ROTATIONAL ROOT CROPS"
 "VEGETABLES-Onions, Red Beets" (Cabbage, Okra, Peas and Sweet Corn are not Root Crops!).
 "COVER CROPS*-Oats, winter barley, sorghum, winter rye, winter wheat." *NOTE" "These crops may be planted provided they are plowed down and not used for food or feed."
 "The cover crops.....rate of 2lb* per acre (maximum one application per year)."
 Change "PRECAUTIONS" to "RESTRICTIONS"
 "Do not feed treated foliage to livestock or allow grazing on treated areas."
 "Do not apply to glandless cotton varieties or crop injury will occur."

- 12. 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 COTTON. The following should be placed under "Application Instructions:

COTTON THREE TO SIX INCHES TALL (Texas...etc.)...W&A Fenders."
 COTTON SIX OR MORE INCHES TALL (All Regions)....bloom stage."
 RATE OF APPLICATION (All Regions and Recommended Sizes of Cotton):.....in 10-40 gals. of water."
 "For calculation of band application rate, use the following formula:

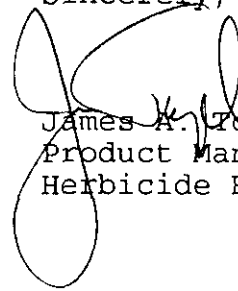
$$\frac{\text{band width(inches)}}{\text{row width(inches)}} \times 2 \text{ qts. per acre} = \text{qts. needed per acre}$$

"Applications should be made.....inches in height.)"
 "A second application may.....and johnsongrass."
 "Apply the second application approximately 1-3 weeks after the first application."

See attachment (1) one 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,



James A. Tompkins
Product Manager (25)
Herbicide Branch 7505C

Enclosures

R*

PROMETRYNE + MSMA

Herbicide with surfactant for weed control in cotton
(FOR AGRICULTURAL OR COMMERCIAL USE ONLY; NOT FOR USE BY HOMEOWNERS)

ACTIVE INGREDIENTS

Prometryne: 2,4-bis (isopropylamino)	
-6-methylthio-s-triazine	8.4%
Monosodium acid methanearsonate*	33.6%
INERT INGREDIENTS	58.0%
TOTAL	100.0%

*Total arsenic, as elemental, all in water soluble form 15.5%.
PROMETRYNE + MSMA contains 1 lb. prometryne and 4 lbs. MSMA per gallon.

**ACCEPTED
with COMMENTS
In EPA Letter Dated
MAY 5 1999**

KEEP OUT OF REACH OF CHILDREN

CAUTION

*Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
9779-317*

STATEMENT OF PRACTICAL TREATMENT

- 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. Do not induce vomiting or give anything by mouth to an unconscious person.
- IF ON SKIN:** Wash with plenty of soap and water. Get medical attention if irritation persists.
- IF IN EYES:** Flush with plenty of water. Get medical attention if irritation persists.
- IF INHALED:** Remove victim to fresh air and apply respiration if indicated.

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.

PRECAUTIONARY STATEMENTS CAUTION HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful if swallowed, inhaled or absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist.

Personal Protective Equipment:

Applicators and other handlers (other than mixers and loaders) must wear long-sleeved shirt and long pants, chemical-resistant gloves, and chemical-resistant footwear plus socks. For exposures outdoors, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). For exposures in enclosed areas, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

Mixers and Loaders must wear long-sleeved shirt and long pants, waterproof gloves, chemical-resistant footwear plus socks, protective eyewear, and a chemical-resistant apron when mixing or loading. For exposures outdoors, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). For exposures in enclosed areas, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

Read Additional PRECAUTIONARY STATEMENTS.

EPA Reg. No. 9779-317

EPA Est. No. 9779-AR-1

Manufactured For
RIVERSIDE/TERRA CORPORATION
P.O. Box 6000, Sioux City, Iowa 51102
Riverside Serves Agriculture. Agriculture Serves Everyone.

NET CONTENTS

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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.

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 regulation.

AGRICULTURAL USE REQUIREMENTS

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

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

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

STORAGE AND DISPOSAL

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

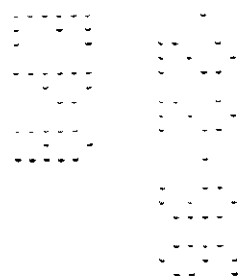
STORAGE

Store in a dry location away from children, animals, foods, feeds, seeds, and 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: Plastic Containers-Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed, by state and local authorities, by burning. If burned, stay out of smoke.



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.
- 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 an 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).

GENERAL INFORMATION

Shake well before using. Use entire contents at one time.

Postemergence directed application of PROMETRYNE + MSMA in cotton will control most annual broadleaf and grassy weeds such as pigweed (*carelessweed*), teaweed (*Sida* spp.), annual morningglory, ragweed, groundcherry, lambsquarters, Florida pusley, purslane, malva, Panicum spp., cocklebur, velvetleaf, smartweed, carpetweed, coffeeweed, foxtail, barnyardgrass (watergrass), dallisgrass, crabgrass, goosegrass, sandbur, seedling johnsongrass, *Bracharia* spp., and nutsedge.

When applied to emerged weeds as a directed spray, PROMETRYNE + MSMA provides foliar knockdown of existing weeds.

Special care must be taken in making band or broadcast postemergence applications of PROMETRYNE + MSMA to prevent contact of the spray with cotton leaves or injury may occur. Recommended practices to utilize in making such applications include: (1) using precision application equipment so that the spray may be accurately directed to the base of the cotton plants and still thoroughly cover the soil and weeds beneath the cotton plants; (2) making applications during calm periods to prevent wind drift; (3) using branch lifters or shields if leaf contact cannot be avoided merely by directing the spray; (4) applying only when all plants have exceeded the minimum recommended height; and (5) applying to level well-prepared surfaces such as beds made with bedshapers that are relatively free of clods.

Applications to cotton less than ten inches tall should be made only when the cotton is bed or flat-planted. Application to furrow-planted cotton should not be made until the furrows are level (plowed in).

Cotton under stress due to unfavorable environmental conditions such as drought, cultivator damage, or fertilizer applications should not be treated.

COTTON THREE TO SIX INCHES TALL (Texas, Arkansas, Louisiana, Mississippi, Missouri and Tennessee)

Extreme care should be taken in making applications to cotton 3-6 inches tall so that the spray does not contact cotton leaves. Applications must be made with a precision applicator equipped with fenders or shields such as Bell Row Shield, Dickey Fenders or W&A Fenders.

COTTON SIX OR MORE INCHES TALL (All Regions)

Applications of PROMETRYNE + MSMA may be made any time after cotton is six inches tall but before it reaches the first bloom stage.

RATE OF APPLICATION (All Regions and Recommended Sizes of Cotton): PROMETRYNE + MSMA should be applied at the rate of 2 qts. per acre broadcast in 10-40 gals. of water.

For calculation of band application rate, use the following formula:

$$\frac{\text{band width (inches)}}{\text{row width (inches)}} \times 2 \text{ qts. per acre} = \text{qts. needed per acre}$$

Applications should be made to weeds not more than 2 inches in height. A second application may be required to control weeds such as nutsedge, watergrass, and johnsongrass. Apply the second application approximately 1-3 weeks after the first application.

SPRAY EQUIPMENT INFORMATION

Accurate, uniform placement of PROMETRYNE + MSMA spray is essential for effective weed control and to avoid crop injury. PROMETRYNE + MSMA can be applied with low pressure spray equipment.

AGITATION: PROMETRYNE + MSMA is a suspended formulation. It is very important to provide adequate agitation in the spray tank to avoid any possibility of settling. Mechanical or jet agitation is recommended. If jet agitation is used, a separate line leading directly from the pump (between the pump and shut-off valve) into the sprayer tank should be provided. This line should be equipped with a jet agitator with a fixed orifice (opening). Make sure this line reaches the bottom of the tank. If two tanks are used, both should be equipped for continuous agitation.

PUMPS: 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.

PRESSURE REGULATORS: Sprayers should be equipped with a pressure regulator that will eliminate pulsation. The pressure regulator should be equipped with an accurate pressure gauge.

CALIBRATION: Several methods can be used to calibrate the sprayer. Whichever method is used, the calibration procedure should be done with extreme care. Calibrate under actual field conditions. Care should then be taken to maintain constant speed and pressure during the spraying operation. It is suggested that sprayer calibration be checked periodically.

TANKS: It is very important that tanks be inspected and cleaned to make sure they are free of corrosion and other contaminants.

NOZZLE TIPS: For band application, use off-center nozzle tips. For broadcast application, use 80° fan-type nozzle tips or off-center nozzle tips.

STRAINERS AND SCREENS: All strainers and screens should be 50-mesh or coarser. An in-line strainer should be placed on the intake side of the pump and screens should be placed just behind each nozzle tip. The use of pressure regulated check valves in nozzle strainers is recommended to prevent nozzles from dripping.

