PM 14 9779-273

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Steve E. Rogosheske Riverside/Terra Corporation P.O. Box 6000 Sioux City, Iowa 51102

Dear Mr. Rogosheske:

Subject: Labeling Amendment

Dimate 4E

EPA Reg. No. 9779-273

Your submission dated 29 August 1996

The labeling amendment referred to above submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, has been received and reviewed, and the labeling is acceptable subject to the comment listed below. Please submit five (5) copies of your final printed labeling incorporating the changes prior to releasing your product for shipment. A stamped copy is enclosed for your records.

Update the statement "Do not contaminate water...wastes" under "Environmental Hazards" to read "Do not contaminate water when disposing of equipment washwaters".

Sincerely,

William Jacobs

Acting Product Manager (14) Insecticide-Rodenticide Branch Registration Division (7505C) P.

Letter Dated Aniethyl] phosphorodithioate)

## **DIMATE 4E**

Systemic Insecticide

Dimethoate (0,0-dimethyl S-[N-(methylcarbamoyl)

55,26% 100.00%

Contains 4 pounds Dimethoate per gallon.

# KEEP OUT OF REACH OF CHILDREN

## WARNING/AVISO

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

## STATEMENT OF PRACTICAL TREATMENT

#### **ORGANOPHOSPHATE**

IF SWALLOWED: Contact 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. Do not induce vomiting or give anything by mouth to an unconscious person.

IN CASE OF CONTACT: Immediately flush eyes or skin with plenty of water for at least 15 minutes shile removing contaminated clothing and shoes. See doctor immediately.

## PRECAUTIONARY STATEMENTS WARNING HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Harmful or fatal if inhaled or swallowed or absorbed through the skin. May cause irritation of eyes, nose, throat and skin. Avoid contact with eyes and skin. Avoid breathing vapor or spray mist. Keep away from domestic animals and foodstuffs. Do not contaminate or apply onto feed or foodstuffs.

NOTE TO PHYSICIANS: Dimethoate may cause cholinesterase inhibition. Atropine is antidotal.

#### Personal Protective Equipment:

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

Applicators and other handlers must wear long-sleeved shirt and long pants, chemical-resistant gloves, such as Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, or Viton ≥ 14 mils; chemical-resistant footwear plus socks; protective eyewear; chemical-resistant headgear for overhead exposure. For exposure outdoors, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C). For exposures in enclosed areas, use a respirator with an organic vapor-removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

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, use detergent and hot water. Keep and wash PPE separately from other laundry.

Read Additional PRECAUTIONARY STATEMENTS.

EPA Reg. No. 9779-273

EPA Est. No. 9779-TX-3

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

Engineering Controls Statement:

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Profection 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**

This pesticide is toxic to wildlife and aquatic invertebrates. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning equipment or disposal of wastes.

HIGHLY TOXIC TO BEES: This product is toxic to bees. Restrict application to the period after dark when bees are inside the hive or in the early morning before the bees are foraging in the fields. Protective information may be obtained from your Cooperative Agricultural Extension Service.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use, spill, or store near heat or open flame.

#### **GENERAL INFORMATION**

DIMATE 4E is useful for control of certain pests of certain fruit crops, nuts, vegetables, and field crops. DIMATE 4E may be applied by ground sprayers or by airplanes, mixing the DIMATE 4E in water to form an emulsion spray solution. To make the spray solution, half fill the spray tank with water, agitate, add the proper amount of DIMATE 4E and then fill the spray tank with water while still agitating. Continue to agitate during use.

When applying with ground sprayers, calibrate so as to apply the recommended amount of DIMATE 4E in not less than 3 gallons of water per acre unless directed otherwise. Airplanes should spray the recommended amount of DIMATE 4E in 3 to 10 gallons of water per acre unless directed otherwise. Always use sufficient water for adequate coverage of the crop foliage. The dosages given under DIRECTIONS FOR USE are the amounts of DIMATE 4E to be applied per acre treated per application. Repeat application as necessary, unless otherwise directed in DIRECTIONS FOR USE. Where a dosage range is given use the lower rate in small or young plants or with light insect infestations; use the higher rate on large or more mature plants or with heavy insect infestations. The hazards and precautions for handling DIMATE 4E in this container are equally applicable to it after dilution with water for spray application.

## **APPLICATION THROUGH IRRIGATION SYSTEMS**

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system.

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

If you should have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an Irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Mix in clean supply tank the recommended amount of this product for acreage to be covered and needed quantity of water.

This product should not be tank-mixed with other pesticides, surfactants, or fertilizers unless prior use has shown the combination noninjurious under your conditions of use.

Follow precautionary statements and directions for all tank-mixed products.

On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem and stage of growth. Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury or illegal pesticide residues.

Meter this product into the irrigation water uniformly during the period of operation. Do not overlap application. Follow recommended label rates, application timing, and other directions and precautions for crop being treated.

Continuous mild agitation of pesticide mixture may be needed to assure a uniform application, particularly if the supply tank requires a number of hours to empty.

## SYSTEMS CONNECTED TO PUBLIC WATER SOURCES

Great care should be taken and properly maintained equipment used when connecting chemigation systems to public water supplies. The following information is provided for users who have diligently considered all other application and water supply options before electing to make such a connection.

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

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

## SPRINKLER IRRIGATION (FOLIAR SPRAY USES)

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

## DIRECTIONS FOR USE

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

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

BEST AVAILABLE COPY

## 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 48 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical-resistant gloves, such as Barrier Laminate, Butyl Rubber ≥ 14 mils, Nitrile Rubber ≥ 14 mils, or Viton ≥ 14 mils, chemical-resistant footwear plus socks, protective eyewear, and a chemical-resistant headgear for overhead exposure.

#### 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.

Keep unprotected persons or pets out of treated areas until sprays have dried.

#### Aerial Application:

Automatic flagging devices should be used whenever feasible.

If human flaggers are employed, they must wear the protective clothing and respirator specified on this label.

# 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, and other agricultural chemicals. Keep container closed when not using. Do not allow water into container as this may cause deterioration of product. Handle in accordance with information given under PRECAUTIONARY STATEMENTS. Do not store under conditions where temperatures may exceed 120°F or be below 45°F. Keep storage area locked when not in use. 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 PESTICIDE 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: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedure approved by state and local authorities.

Crop	Pest Controlled	Rate	Interval (Days) Between Last Application and Harvest
FRUIT: Apples	apple maggot* codling moth**	1 pt./100 gals. water	28 Do not apply during the bloom period. Apply at petal-fall and every 10 to 14 days thereafter until control is achieved. Do not graze livestock in treated orchards. *Under heavy infestations, some sting injury may occur. **Midwest and eastern states only.
Apples, Pears	aphids, leaf- hoppers, mites (except rust mites)	1/2 to 1 pt./100 gals. water	28 Do not apply during the bloom period. Do not graze livestock in treated orchards.

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Grapefruit Lemons Oranges Tangerines	aphids	Ground equipment: 1/2 to 1 pt./100 gals, water. Apply as an outside coverage spray. Aircraft Equipment: 1 to 2 qts./acre in 5 to 10 gals. water.	15
	mites (except rust mites)	Ground equipment: 1/2 to 1 pt./100 gals, water, Apply as a thorough distribution coverage spray.	15
	scales (except black or snow)	Ground equipment: 1 to 1½ pts./100 gals. water. Apply as a thorough coverage spray.	45
	thrips	Ground Equipment: 1/2 to 1 pt./100 gals. water. Apply as a mist spray. Aircraft Equipment: 1 to 2 qts./acre in 5 to 10 gals. water,	15
	whiteflies	Ground Equipment: 1 pt./100 gals. water. Apply as a thorough distribution coverage spray.	15
	Do not apply during bloom period. Do not use on citrus seedlings. Make no more than 2 applications to mature fruit. Do not enter treated groves within 4 days of last application. Do not graze livestock in treated orchards.		
Nuts: Pecans	aphids, mites, leafhoppers	Ground equipment: 2/3 pt./acre.	21 Do not graze livestock in treated groves.
	aphids	Aerial Equipment: 2/3 pt./acre in a minimum of 5 gals. of finished spray.	
VEGETABLE CROPS: Beans, (green, lima, snap, dry)	aphids, grasshoppers, leafhoppers, leaf miners, lygus bugs, mites	1/2 to 1 pt./acre	Beans may be harvested on day of application. Do not feed treated vines.
Broccoli Cauliflower	aphids	1/2 to 1 pt./acre	7
Cabbage	aphids	1/2 to 1 pt./acre	7
Head lettuce	aphids, leaf- hoppers, leaf miners	1/2 pt./acre	7
Celery (Florida)	leaf miners	Ground Equipment: 1 pt./acre	7
Leaf Lettuce, Spinach, Collards, Kale, Turnip (greens and roots), Mustard greens, Swiss chard, Endive (Escarole)	aphids, leafhoppers, leaf miners	1/2 pt./acre	14
Melons (except watermelons)	aphids, leafhoppers, leaf miners, thrips	1 pt./acre	3

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Watermelons	aphids, leafhoppers, leaf miners,	1/2 to 1 pt./acre	3
Peas	aphids	1/3 pt./acre	Peas may be harvested on day of application. Do not feed or graze hay within 21 days after last application when a stationary viner is used. Do not feed or graze when a mobile viner is used. Do not make more than one application per season.
Peppers	aphids, leaf miners, maggots	1/2 to 2/3 pt./acre	Peppers may be harvested on day of application.
Potatoes	aphids, grasshoppers, leaf miners, leafhoppers	1/2 to 1 pt./acre	Potatoes may be harvested on day of application.
Tomatoes	aphids, leaf miners, leafhoppers	1/2 to 1 pt./acre	7
		are a problem, the above rates on the manufacturer's directions for	f DIMATE 4E are compatible with endosulfan, control of these insects.
FIELD CROPS: Alfalfa	aphids, grasshoppers, leafhoppers, lygus bugs, reduction of alfalfa weevil larvae.	1/2 to 1 pt./acre	Do not apply to alfalfa in the bloom period. Do not apply within 10 days of harvest or pasturing. Make only one application per cutting, Effective only on cutting to which applied.
Field Corn	banks grass mites (excluding Trans- Pecos area of Texas), aphids, bean beetle, two- spotted spider mite, corn rootworm adult*	2/3 to 1 pt./acre Aerial Application: spray over the foliage when mites appear. Apply above rates in 1 or more gals, of water per acre.	14 Apply as necessary. Make no more than three applications per year. Do not feed or graze within 14 days of last application.
	grasshoppers	1 pt./acrè. Ground Application: Apply above rate in 20 to 40 gals. of water per acre, Aerial Application: Apply above rate in 1 or more gals. of water per acre,	*Note: Corn rootworm adult not registered for use in California.
Cotton (grown in California and Arizona)	lygus bugs, leafhoppers, black fleahoppers	1/2 to 1 pt./acre	14 Repeat applications should not be made at intervals closer than 14 days. Make only 2 applications per season at the higher rate. Do not feed treated forage or graze livestock or treated fields.
Cotton	aphids, mites, thrips, fleahoppers	1/4 to 1/2 pt./acre	14 Repeat applications should not be made at intervals closer than 14 days. Do not feet treated forage or graze livestock on treated fields.
	lygus bugs	1/2 pt./acre	
Safflower (grown in California and Arizona)	aphids, leaf- hoppers, lygus bugs, thrips	1/2 to 1 pt./acre	14 Repeat applications should not be made a intervals closer than 14 days. Make colly applications per season at the higher rate.

Sorghum (milo)	aphids	1/2 to 1 pt./acre Ground Application: Apply above rates in 25 to 40 gals. of water per acre. Aerial Application: Apply above rates in 1 or more gals of water per acre.	Do not feed or graze within 28 days of last application. Make no more than 3 applications as needed per season. Do not apply after heading.	
	banks grass mites (excluding Trans- Pecos area of Texas)	1 pt./acre Ground Application: Apply above rates in 25 to 40 gals. of water per acre. Aerial Application: Apply above rate in 1 or more gals. of water per acre.		
	sorghum midge	1/4 to 1/2 pt./acre Aerial Application: Apply above rates in 1 or more gals. of water per acre.	Do not feed or graze within 28 days of last application. Make no more than 3 applications as needed per season. Do not apply after heading.	
Soybeans	Mexican bean beetle, spider mites, bean leaf beetle	pt./acre     Aerial Application: Apply recommended rate in a minimum of 2 gals of water per acre.	21 Do not feed or graze within 5 days of last application.	
	grasshoppers	1 pt./acre Ground Application: Apply above rate in 25 to 40 gals, of water per acre. Aerial Application: Apply above rate in 1 or more gals, of water per acre.		
Wheat	aphids (greenbugs)	1/2 to 3/4 pt./acre	Do not apply within 14 days of grazing immature plant. Do not harvest grain within 35 days of last application. Do not make more than 2 applications per season.	
	brown wheat mite	1/3 to 1/2 pt./acre		
	grasshoppers	3/4 pt./acre		
SEED CROPS: Alfalfa	aphids, leafhoppers, lygus bugs, grasshoppers, reduction of alfalfa weevil larvae	1/2 to 1 pt./acre	Do not apply to alfalfa in the bloom period. Do not feed or graze livestock in treated crops, hay, threshings, or stubble within 10 days of application.	
CITRUS TREESNONE	EARING AND NURSER		MUDA GRASS.  n service for proper timing application.	
CITRUS: (California, Arizona) Grapefruit, Lemons, Oranges, Tangerines	aphids, thrips	Foliar Spray: 1 pint DIMATE 4E per 100 gallons of water. Repeat applications as necessary. May be applied in the year grapefruit, lemon, orange, and tangerine trees begin to bear fruit. Do not enter treated groves within 4 days of last application. Do not graze livestock in treated orchards.		
		Soil Drench (Trees 1 to 3 years old): 2 quarts DIMATE 4E per acre applied in the furrow or basin around the base of trees. Apply when insect injury to new growth appears. Do not apply to trees that will bear fruit within one year. Do not graze livestock in treated orchards.		

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.