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Jacket 9779-273

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ACCEPTED
NOV 01 1991
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 9779-273

R®

DIMATE 4E

Systemic insecticide

ACTIVE INGREDIENT	
Dimethoate (O,O-dimethyl S-[N-(methylcarbamoyl) methyl] phosphorodithioate)	44.74%
INERT INGREDIENTS	55.26%
Total	100.00%

Contains 4 pounds Dimethoate per gallon.

STOP-READ LABEL BEFORE USING.

KEEP OUT OF REACH OF CHILDREN

WARNING/AVISO

Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

STATEMENT OF PRACTICAL TREATMENT

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 while removing contaminated clothing and shoes. See doctor immediately.

See additional PRECAUTIONARY STATEMENTS on side panel.

EPA Reg. No. 9779-273 EPA Est. No. 9779-TX-3

Manufactured For
RIVERSIDE/TERRA CORPORATION
Terra Centre, 600 Fourth Street, Sioux City, Iowa 51101
Riverside Serves Agriculture. Agriculture Serves Everyone.

NET CONTENTS
____ GALS.

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. Wash thoroughly after handling. In case of contact, flush with plenty of water for at least 15 minutes. Get medical attention. Keep away from domestic animals and foodstuffs. Do not contaminate or apply onto feed or foodstuffs. Do not apply this product in such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.
NOTE TO PHYSICIANS: Dimethoate may cause cholinesterase inhibition. Atropine is antidotal.

ENVIRONMENTAL HAZARDS

POISONOUS TO FISH AND WILDLIFE: This product is toxic to shrimp, crab, birds and other wildlife. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment, or disposal of wastes. Apply this product only as specified on this label.
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 on 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; flood (basin); furrow; border; or drip (trickle) 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.

SPRINKER 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.

FLOOD (BASIN), FURROW AND BORDER CHEMIGATION (SOIL DRENCH USES)

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements. (1) The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. (2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. (3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. (4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. (5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. (6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH 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.

DIRECTIONS FOR USE

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

RE-ENTRY STATEMENT

Do not enter treated areas without protective clothing until sprays have dried. Because certain states may require more restrictive re-entry intervals for various crops treated with this product, consult your State Department of Agriculture for further information.

REQUIRED CLOTHING AND EQUIPMENT FOR APPLICATION.

Ground Personnel:

All applicators, flaggers and all personnel involved with the mixing, loading, and transferring operations must wear the protective clothing and equipment enumerated below. Pilots are exempt from this requirement. The protective clothing and equipment to be worn are as follows:

a. Impermeable gloves (for example, rubber or plastic covered reinforced gloves).
b. Boots or boot covers.
c. Long-sleeved shirt and long pants.
d. Wide-brimmed hat.
e. Respirators must be worn by flaggers and mixer loaders.

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.

NOTICE TO CROP OWNERS

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. In case of accidental exposure, follow the information given under STATEMENT OF PRACTICAL TREATMENT and have exposed person(s) see a physician. When oral warnings are given, warnings shall be given in a language customarily understood by workers.

Oral warnings must be given if there is a reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: WARNING. Area treated with Dimethoate on (date). Do not enter without appropriate protective clothing. In case of accidental exposure, immediately remove contaminated clothing, wash the affected area, contact your supervisor, and have him take you to the doctor.

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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 deterior-ation 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	Pests 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, leafhoppers, mites (except rust mites)	½ to 1 pt./100 gals. water	28 Do not apply during the bloom period. Do not graze livestock in treated orchards.
Grapefruit Lemons Oranges Tangerines	Aphids	Ground Equipment: ½ 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: ½ 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: ½ 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.	

Crop	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
VEGETABLE CROPS: Beans (green, lima, snap, dry)	Aphids, grasshoppers, leafhoppers, leaf miners, lygus bugs, mites	½ to 1 pt./acre	Beans may be harvested on day of application. Do not feed treated vines.
Broccoli Cauliflower	Aphids	½ to 1 pt./acre	7
Cabbage	Aphids	½ to 1 pt./acre	7
Head lettuce	Aphids, leafhoppers, leaf miners	½ 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	½ pt./acre	14
Melons (except watermelons)	Aphids, leafhoppers, leaf miners, thrips	1 pt./acre	3
Watermelons	Aphids, leaf miners, leafhoppers	½ 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	½ to 2/3 pt./acre	Peppers may be harvested on day of application.
Potatoes	Aphids, grasshoppers, leaf miners, leafhoppers	½ to 1 pt./acre	Potatoes may be harvested on day of application.
Tomatoes	Aphids, leaf miners, leafhoppers	½ to 1 pt./acre	7

Where cabbage worms and cabbage loopers are a problem, the above rates of DIMATE 4E are compatible with endosulfan, malathion or parathion. Use in accordance with the manufacturers' directions for control of these insects.

Crop	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
FIELD CROPS: Alfalfa	Aphids, grasshoppers, leafhoppers, lygus bugs, reduction of alfalfa weevil larvae.	½ 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)	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./acre 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.	
Cotton (grown in California and Arizona)	Lygus bugs, leafhoppers, black fleahoppers	½ 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 on treated fields.
Cotton	Aphids, mites, thrips, fleahoppers	¼ to ½ pt./acre	14 Repeat applications should not be made at intervals closer than 14 days. Do not feed treated forage or graze livestock on treated fields.
	Lygus bugs	½ pt./acre	
Safflower (grown in California and Arizona)	Aphids, leafhoppers, lygus bugs, thrips	½ 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.

Crop	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Sorghum (milo)	Aphids	½ 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	½ to ½ 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	1 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 (green-bugs)	½ to 3/4 pt./acre	Do not apply within 14 days of grazing immature plant. Do not harvest grain within 60 days of last application. Do not make more than 2 applications per season.
	Brown wheat mite	1/3 to ½ pt./acre	
	Grasshoppers	3/4 pt./acre	
SEED CROPS: Alfalfa	Aphids, leaf-hoppers, lygus bugs, grass-hoppers, reduc-tion of alfalfa weevil larvae	½ 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.

ATTENTION:
DO NOT USE ON SEED ONIONS, SEED CARROTS, OR SEED BERMUDA GRASS.

CITRUS TREES - NONBEARING AND NURSERY STOCK

Consult your state agricultural experimental station or state agricultural extension service for proper timing of applications.

Plant	Pests Controlled	Amount
CITRUS: (California, Arizona) Grapefruit Lemons	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.
Oranges Tangerines		Soil Drench (Trees 1 to 3 years old): 2 quarts DIMATE 4E per acre applied in the furrow or basin around the base of tree. 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.