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51036-110

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MAR 6 1995

Lee Tharrington
Registrations Assistant
Micro Flo Company
P.O. Box 5948
Lakeland, FL 33807-5948

Dear Mr. Tharrington:

Subject: Dimethoate 4E
EPA Registration No. 51036-110
Amendment dated 1/13/95

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

Sincerely yours,

RAF

Robert A. Forrest
Product Manager (14)
Insecticide-Rodenticide Branch
Registration Division (7505C)

Enclosure

Bedwards A. 51036/110.2

3/3/95

DIMETHOATE 4E
SYSTEMIC INSECTICIDE
ORGANOPHOSPHATE

ACTIVE INGREDIENT: Dimethoate (0,0-dimethyl S-(N-methyl-
carbamolymethyl) phosphorodithioate)43.5%
INERT INGREDIENTS:.....56.5%
TOTAL.....100.0%

1 gallon contains 4 pounds Dimethoate

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

IF SWALLOWED: Call a physician or Poison Control Center. Give one or two 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 or convulsing person.

IF INHALED: If not breathing, give artificial respiration. Get medical attention.

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

IF ON SKIN: Wash off with soap and water and remove contaminated clothing and shoes. Get medical attention.

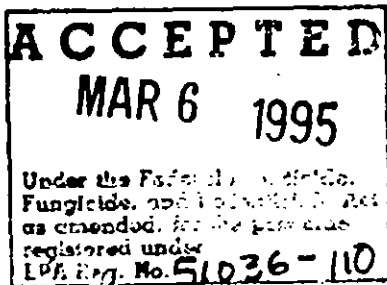
This product is an organophosphorus ester that inhibits cholinesterase.

NOTE TO PHYSICIAN: This product may cause cholinesterase inhibition. Antidote is atropine.

See Additional Precautionary Statements Inside

EPA Reg. No. 51036-110

EPA Est. No. 51036-GA-1



Manufactured By
MICRO FLO COMPANY
P.O. Box 5948
Lakeland, Florida 33807

3012

PRECAUTIONARY STATEMENTS
Hazards To Humans And Domestic Animals

WARNING

May be fatal if swallowed. May cause eye injury. Harmful if absorbed through skin. May cause irritation of the nose and throat. Do not get into eyes. Avoid breathing the vapor or spray mist.

Keep away from domestic animals and foodstuffs. Do not contaminate or apply onto feed or foodstuffs.

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 G on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants
2. Chemical-resistant gloves, such as barrier laminate or viton
3. Shoes plus socks
4. Protective eyewear
5. Chemical-resistant headgear for overhead exposure

Mixers and loaders must wear:

1. Longs-sleeved shirt and long pants
2. Chemical-resistant gloves, such as barrier laminate or viton
3. Shoes plus socks
4. Protective eyewear
5. Chemical-resistant headgear
6. For exposure 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)

For outdoor exposure, use a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C)

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 and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE seperately from other laundry.

Engineering Controls:

Human flaggers must be in enclosed cabs. When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

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

ENVIRONMENTAL STATEMENTS

This product is toxic to wildlife and aquatic invertebrates. For terrestrial use, do not apply directly to water, 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.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or flame.

DIRECTIONS FOR USE

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

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 and restricted-entry intervals. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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.

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:

1. Coveralls
2. Chemical-resistant gloves, such as barrier laminate or viton
3. Shoes plus socks
4. Protective eyewear
5. 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 children, pets and other unprotected persons out of treated areas until sprays have dried.

CHEMIGATION PROHIBITION

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

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage or disposal. Do not store under conditions which might adversely affect the container or its ability to function properly.

STORAGE: Do not store below temperature of 32 degrees F., as it may tend to crystallize. Avoid storage above 90 degrees F., as prolonged storage above 90 degrees F. may cause some loss in grade. Store in safe manner. Store in original container only. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength.

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 incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

DIRECTIONS FOR APPLICATION

This product is intended for use by the commercial grower or commercial applicator in conventional hydraulic sprayers, ground applicators or airplane sprayers. Do not apply when weather conditions favor drift of spray from areas treated. Repeat applications as necessary unless otherwise specified. Consult your

state experiment station or state extension service for proper timing of applications.

Dimethoate 4E has systemic and contact activity against a broad spectrum of piercing, sucking and chewing insects; however, it may not control certain organophosphate resistant species.

For proper mixing spray tank should be at least three-quarters filled with water before adding Dimethoate 4E. Mechanical agitation or recirculation through pump bypass to tank is usually sufficient for maintaining a good dispersion.

Spray tank mixtures of Dimethoate 4E with alkaline insecticides and fungicides should be applied promptly.

AERIAL APPLICATION: Apply at least one gallon of finished spray per acre. Apply at least 5 gallons finished spray per acre in California.

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.

GROUND APPLICATION: Use water for dilution and apply at least 5 gallons of finished spray per acre.

NOTE: Pre-Harvest Interval days indicated in () after each use.

FRUIT

APPLES: (28)

Apple maggot, Codling moth*, Aphids, Leafhoppers and Mites (except rust mites) -

1/2 to 1 pt./100 gals. water for dilute application. Apply as a thorough distribution coverage spray.

For concentrate (mist) application, apply 1 to 2 quarts per acre in sufficient water to provide full coverage of foliage.

Do not apply when trees or substantial numbers of weeds in the orchard are in bloom.

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.

GRAPEFRUIT, LEMONS, ORANGES, TANGERINES: (15)

Aphids, Mites (except rust mites), Thrips, Whiteflies -

Ground Equipment: 1/2 to 1 pt./100 gals. water for dilute application. Apply as a thorough distribution coverage spray.

For concentrate (mist) application, apply 1 to 2 quarts per acre in sufficient water to provide full coverage of foliage.

Aircraft equipment: 1 to 2 qts./acre in 5 to 10 gals. water.
Use higher rate if disease pressure is heavy or if orchard foliage is dense.

Scales (except black or snow) -

Ground Equipment: 1/2 to 1 1/2 pt./100 gals. water for dilute application. Apply as a thorough distribution coverage spray. For concentrate (mist) application, apply 1 to 3 quarts per acre in sufficient water to provide full coverage of foliage.

Aircraft equipment: 1 to 3 qts./acre in 5 to 10 gals. water.
Use higher rate if disease pressure is heavy or if orchard foliage is dense.

NOTE: When using high rate for scale control, Pre-Harvest Interval is 45 days.

Do not apply when trees or substantial numbers of weeds in the orchard are in bloom.

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.

NOTE: The REI for citrus is 4 days.

PEARS: (28)

Ground Equipment: 1/2 to 1 pt./100 gals. water for dilute application. Apply as a thorough distribution coverage spray. For concentrate (mist) application, apply 1 to 2 quarts per acre in sufficient water to provide full coverage of foliage.

Aircraft equipment: 1 to 2 qts./acre in 5 to 10 gals. water.

Use higher rate if disease pressure is heavy or if orchard foliage is dense.

Do not apply when trees or substantial numbers of weeds in the orchard are in bloom.

Do not graze livestock in treated orchards.

NUTS

PECANS: (21)

Aphids, mites, leafhoppers - Ground Equipment: 2/3 pt./acre.

Aerial Equipment: 2/3 pt./acre in a minimum of 5 gals. of finished spray.

Do not graze livestock in treated groves.

VEGETABLE CROPS

BEANS (GREEN, LIMA, SNAP, DRY): (0)

Aphids, grasshoppers, leafhoppers, leaf miners, lygus bugs, mites, bean leaf beetle, Mexican bean beetle - 1/2 to 1 pt./acre.

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Do not feed treated vines.

Do not apply if the crop or weeds in the treatment area are in bloom.

BROCCOLI, CAULIFLOWER: (7)
Aphids - 1/2 to 1 pt./acre.

BRUSSELS SPROUTS (FOR USE IN CALIFORNIA ONLY): (10)
Aphids- 1 to 2 pt./acre in a minimum of 100 gallons of water using ground equipment. Apply when insects first appear and repeat as needed. Do not feed or graze livestock in treated fields. Do not apply by air. Do not exceed six applications per growing season.

CABBAGE: (7)
Aphids - 1/2 to 1 pt./acre.

HEAD LETTUCE: (7)
Aphids, leafhoppers, leaf miners - 1/2 pt./acre.

CELERY (Florida): (7)
Leaf miners - Ground Equipment: 1 pt./acre.

LEAF LETTUCE, SPINACH, COLLARDS, KALE, TURNIP (GREENS AND ROOTS), MUSTARD GREENS, SWISS CHARD, ENDIVE (ESCAROLE): (14)
Aphids, leafhoppers, leaf miners - 1/2 pt./acre.

MELONS (EXCEPT WATERMELONS): (3)
Aphids, leafhoppers, leaf miners, thrips - 1 pt./acre.

WATERMELONS (Except California): (3)
Aphids, leaf miners, leafhoppers - 1/2 to 1 pt./acre.

LUPINE (Except California): (0)
Aphids, Lygus bugs - 1/2 to 1 pt/acre. Apply when aphids first appear.
Make only 2 applications per season.
Do not feed or graze forage or hay.
Do not apply if crop or weeds in the treatment area are in bloom.

PEAS, LENTILS: (0)
Aphids - 1/3 pt./acre. Do not feed or graze hay within 21 days after last application.
Do not make more than one application per season.
Do not apply if crop or weeds in the treatment area are in bloom.
Do not feed or graze hay within 21 days after last application when stationary viner is used. Do not feed or graze when a mobile viner is used.
Not for use on Lentils in California.

PEPPERS: (0)
Aphids, leaf miners, maggots - 1/2 to 2/3 pt./acre.

POTATOES: (0)

Aphids, grasshoppers, leaf miners, leafhoppers - 1/2 to 1 pt./acre.

TOMATOES: (7)

Aphids, leaf miners, leafhoppers - 1/2 to 1 pt./acre. Where cabbage worms and cabbage loopers are a problem, the above rates of Dimethoate 4EC are compatible with Endosulfan or Malathion. Use in accordance with the manufacturers' directions for control of these insects.

FIELD CROPS

ALFALFA: (10)

Aphids, grasshoppers, leafhoppers, lygus bugs, reduction of alfalfa weevil larvae - 1/2 to 1 pt./acre.

Do not apply if the crop or weeds in the treatment area are in bloom.

Do not apply within 10 days of pasturing.

Make only one application per cutting. Effective only on cutting to which applied.

FIELD CORN: (14)

Banks grass mites (excluding Trans-Pecos area of Texas), aphids, bean beetle, corn rootworm adult - 2/3 to 1 pt./acre.

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.

Apply as necessary.

Make no more than three applications per year.

Do not feed or graze within 14 days of last application.

Do not apply to corn during the pollen shed period.

COTTON (Except Arizona and California): (14)

Aphids, mites, thrips, fleahoppers - 1/4 to 1/2 pt./acre.

Lygus bugs - 1/2 pt./acre. Repeat applications should not be made at intervals closer than 14 days. Do not feed treated forage or graze livestock on treated fields.

Note: Pre-Harvest Interval is 40 days if once refined vegetable oil is used for dilution.

Make only 2 applications per season at the higher rate.

Apply at least one quart of finished spray/acre.

Do not feed treated forage or graze livestock on treated fields.

COTTON (GROWN IN CALIFORNIA AND ARIZONA): (14)

Lygus bugs, leafhoppers, black fleahoppers - 1/2 to 1 pt./acre. 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.

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SAFFLOWER (GROWN IN CALIFORNIA AND ARIZONA): (14)

Aphids, leafhoppers, Lygus bugs, Thrips - 1/2 to 1 pt./acre.
Repeat applications should not be made at intervals closer than 14 days.

Make only 2 applications per season at the higher rate.

SORGHUM (MILO): (28)

Aphids - 1/2 to 1 pt./acre.

Banks grass mites (excluding Trans-Pecos area of Texas) - 1 pt./acre.

Grasshoppers - 1 pt./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: (21)

Mexican bean beetle, spider mites, bean leaf beetle - 1 pt./acre.

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.

Do not feed or graze within 5 days of last application.

WHEAT: (35)

Note: Pre-Harvest Interval for California is 60 days.

Aphids (greenbugs) - 1/2 to 3/4 pt./acre.

Brown wheat mite - 1/3 to 1/2 pt./acre.

Grasshoppers - 3/4 pt./acre. Do not apply within 14 days of grazing immature plant.

Make no more than 2 applications per season.

SEED CROPS

ALFALFA:

Aphids, leafhoppers, lygus bugs, grasshoppers, reduction of alfalfa weevil larvae - 1/2 to 1 pt./acre.

Do not apply if the crop or weeds in the treatment area are in bloom.

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.

**OUTDOOR ORNAMENTAL PLANTS
(GROUND APPLICATION ONLY)
(NOT FOR USE IN CALIFORNIA)**

Dimethoate 4E is generally effective in controlling aphids, thrips, leaf miners, scales, leafhoppers and mites. Make adequate spray when pests appear or when damage is first observed. Do not overdose or overspray. For proper timing of treatments for the control of specific pests on ornamental plants, consult your state agricultural experiment station or state agricultural extension service.

Do not use on ornamental plants not listed. Do not use on any ornamental stock plants grown as a source of propagation material, such as cuttings, layers, root stocks or scions for grafting or budding. Do not use in spray mixtures containing oil. Do not use on plants growing in greenhouses.

AZALEAS:

Lace Bugs, Leaf Miners, Mites, Tea Scale and White Flies - 1 Teaspoonful per gallon of water.

CAMELLIAS:

Aphids, Camellia Scale and Tea Scale - 1 Teaspoonful per gallon of water.

ROSES:

Leafhoppers and Thrips - 1 Teaspoonful per gallon of water.

Foliar spray: Apply 2 sprays 6 weeks apart the first year followed by annual applications soon after the first growth begins in the Spring.

Soil Drench: Apply as a soil drench around the base of plants in early spring at the rate of 2 Tablespoons per gallon of water per plant.

BIRCH:

Aphids and Leafminers - 1/2 Teaspoonful per gallon of water. For leafminers, apply when leaves are expanded and repeat in 6 weeks.

BOXWOOD:

Leafminers, Mealy Bugs and Mites - 1 Teaspoonful per gallon of water. For leafminers, apply in spring when leaf miner flies first appear or in early summer for control of larvae.

GLADIOLUS:

Aphids and Thrips - 1 Teaspoonful per gallon of water.

HEMLOCKS:

Mites and Scales - 1 Teaspoonful per gallon of water.

EUONYMUS:

Aphids and Scales - 1 Teaspoonful per gallon of water.

PINE JUNIPER:

Mites, Aphids, Bagworms, European Pine Shoot Moth, Nantucket Pine Tip Moth and Zimmerman Pine Moth - 2 Teaspoonfuls per gallon of

water.

~~CONDITIONS OF SALE~~

~~All statements concerning the use of this product apply only when used as directed. THE MANUFACTURER MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, CONCERNING THIS PRODUCT OR ITS USE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE LABEL. Read all directions carefully.~~

MICRO FLO WARRANTS THAT THIS PRODUCT CONFORMS TO THE CHEMICAL DESCRIPTION ON THE LABEL THEREOF AND IS REASONABLY FIT FOR THE PURPOSE STATED ON SUCH LABEL ONLY WHEN USED IN ACCORDANCE WITH THE DIRECTIONS FOR USE. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT BECAUSE OF SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF MICRO FLO. IN NO CASE SHALL MICRO FLO BE LIABLE FOR THE CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER.

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