

United States Environmental Protection Agency
Washington, D.C. 20460

OCT 4 1993

Office of
Prevention, Pesticides and
Toxic Substances

Morris Gaskins
MICRO-FLO CO.
BOX 5948
LAKELAND FL 33807

Subject: Label Amendment Submission of 05/27/93
in Compliance with WPS Labeling Requirements
EPA Reg No. 51036-110
DIMETHCATE 4E

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is accepted subject to the comments listed below.

Based on your certification, the Agency has accepted only those changes to your labeling which are necessary to comply with PR Notices 93-7 and 93-11, which reflect the WPS labeling requirements of 40 CFR part 156, subpart K. Any other labeling changes submitted in connection with this amendment application and not directly related to compliance with PR Notice 93-7 or 93-11 have neither been reviewed nor accepted by the Agency. If you wish to make any such changes, you must submit a separate amendment application proposing them. If your product registration is currently suspended, acceptance of this labeling amendment does not affect the suspension in any way.

A copy of your proposed labeling stamped "Accepted with comments" is attached. Make any required changes described in the attached and send three copies of final labeling as soon as it is available to:

Document Processing Desk (FIN-LABEL)

Office of Pesticide Programs (H-7504C)
U.S. Environmental Protection Agency
401 M Street SW
Washington, DC 20460-0001

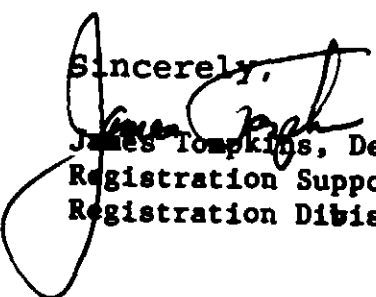
Hand or courier deliveries of final labels may be made to:

Document Processing Desk (FIN-LABEL)
Room 266A Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, VA 22202

Please correct the typographical errors circled on the draft before printing final labeling.

In your final labeling the "Agricultural Use Requirements" text must be contained in a clearly separate box. This box may be set apart by a line, by another graphical device, by a different color background, or in any other way that clearly distinguishes it from surrounding text.

Sincerely,



James Tompkins, Deputy Chief
Registration Support Branch
Registration Division (7505W)

Draft labeling for WPS language in response to PR 93-7

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

ACCEPTED
with COMMENTS
In EPA Letter Dated

OCT 4 1993

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

51036-110

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 separately from other laundry.

Engineering Controls:

Human flaggers must be in enclosed cabs. The enclosed cabs must be used 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 requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMENDATIONS**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 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 STATEMENTS

This product is toxic to wildlife and aquatic invertebrates. 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.

EXCEPTION: The REI for grapes and citrus is 4 days

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.

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+* - 1 pt./100 gals. water. 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.

APPLES, PEARS: (28)

Aphids, Leafhoppers, Mites (except rust mites) - 1/2 to 1 pt./100 gals. water. Do not apply when trees or substantial numbers of weeds in the orchard are in bloom. Do not graze livestock in treated orchards.

GRAPEFRUIT, LEMONS, ORANGES, TANGERINES: (15)

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.

Mites (except rust mites) - Ground Equipment: 1/2 to 1 pt./100 gals. water. Apply as a thorough distribution coverage spray.

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.

Whiteflies - Ground Equipment: 1 pt./100 gals. water. Apply as a thorough distribution coverage spray.

Scales (except black or snow) - Ground Equipment: 1 to 1 1/2 pts./100 gals. water. Apply as a thorough coverage spray.

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.

NUTS

PECANS: (21)

Aphids, mite, 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. 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.

CABBAGE: (3)
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.
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.

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: (60)

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.

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.