



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 14 1994

Nik Ramswick
UNIVERSAL COOPERATIVES, INC.
P.O. Box 460 7801 Metro Parkway
Minneapolis, MN 55440

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Subject: Label Amendment Submission of 07/27/93 in Response to PR Notice 93-7
EPA Reg. No. 1386-625
DIMETHOATE 400

Dear Registrant:

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

WHAT THIS ACCEPTANCE MEANS:

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

WHAT YOU NEED TO DO NEXT:

Send to EPA one (1) copy of the final printed labeling:

- **BEFORE** selling or distributing any product bearing the final printed labeling
- AND**
- **WITHIN** one year from date of this acceptance.



Recycled/Recyclable
 Printed with Soy/Canola Ink on paper that
 contains at least 50% recycled fiber

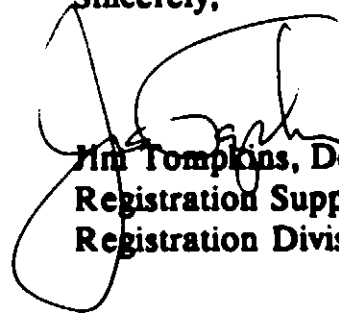
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)
Office of Pesticide Programs (7505C)
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

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

Sincerely,



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

Attachment

ACCEPTED
with COMMENTS
in EPA Letter Dated

JAN 14 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, for the pesticide
registered under EPA Reg. No.
1356-625

DIMETHOATE 400

**A Systemic Insecticide/Miticide For Use on Many
Field Crops, Vegetable Crops, Fruits, and Nuts.**

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.)

See Side Panel For Additional Precautionary Statements

ACTIVE INGREDIENT:	
Dimethoate [O,O-Dimethyl S-(N-methylcarbamoyl) methyl phosphorodithioate]	43.5%
INERT INGREDIENTS*	<u>56.5%</u>
Total	100.0%

Contains 4 Pounds Of Dimethoate Per Gallon. *This Product
Contains Xylene.

NET CONTENTS: 2 1/2 Gallons

EPA Reg. No. 1386-625
EPA Est. No. 1386-OH-1



UNIVERSAL COOPERATIVES, INC., MINNEAPOLIS, MN 55440

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING**

Harmful or fatal if swallowed. Harmful if inhaled. Concentrate causes eye irritation. Avoid breathing vapor or spray mist. Use only with adequate ventilation. Avoid contact with skin and eyes.

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:

- *Coveralls over long-sleeved shirt and long pants
- *Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, or viton.
- *Chemical-resistant footwear plus socks
- *Protective eyewear
- *Chemical-resistant headgear for overhead exposure
- *Chemical-resistant apron when cleaning equipment, mixing, or loading
- *For exposures in enclosed areas, 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 exposures outdoors, 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/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Engineering controls statements: When handlers use 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

- *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.

**STATEMENT OF PRACTICAL TREATMENT
ORGANOPHOSPHATE**

IF IN EYES: Flush with plenty of water. Get medical attention. **IF SWALLOWED:** Contact a physician or poison control center immediately. **IF ON SKIN:** Wash immediately with soap and water. **IF INHALED:** Remove person to fresh air. Apply artificial respiration if necessary.

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NOTE TO PHYSICIAN: This product may cause cholinesterase inhibition. Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective when used in conjunction with atropine.

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 of equipment or disposal of wastes.

This pesticide 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. Protective information may be obtained from your Agricultural Extension Service.

PHYSICAL AND CHEMICAL HAZARDS

Combustible liquid and vapor. Do not use, pour, spill or store near heat or open flame.

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.

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 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:

- *Coveralls over long-sleeved shirt and long pants
 - *Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber, or viton
 - *Chemical-resistant footwear plus socks
 - *Protective eyewear
 - *Chemical-resistant headgear for overhead exposure
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BEFORE USING, READ WARNING STATEMENTS ON CONTAINER LABEL.

This product is intended for use in conventional hydraulic sprayers, ground applicators or aerial sprayers. Do not apply when weather conditions favor drift of spray from treated areas. Repeat applications as necessary unless otherwise specified. Consult your state experiment station or state extension service for proper timing of applications.

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

COMPATIBILITY: This product is compatible in spray tank mixes with most insecticides, miticides, and fungicides, provided they are not alkaline in reaction. Field experience indicates that Dimethoate has been satisfactorily mixed with SEVIN[®] 1, DIAZINON[®] 2, PYDRIN[®] 3, GUTHION[®] 4, malathion, parathion, dicofol, CYPREX[®] Fruit Fungicide⁵, captan, and thiram. Because uniform dispersibility and sprayability may be influenced by pesticide combinations used, it is recommended that compatibility be determined before adding pesticides to the spray tank. The addition of X-77[®] Spreader at recommended rates will usually eliminate any incompatibility noted.

Tank mixing must be done in accordance with the more (most) restrictive of label limitations and precautions for all products to be mixed. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

FOR PROPER MIXING SPRAY TANK SHOULD BE AT LEAST THREE-QUARTERS FILLED WITH WATER BEFORE ADDING DIMETHOATE 400. MECHANICAL AGITATION OR RECIRCULATION THROUGH PUMP BYPASS TO TANK IS USUALLY SUFFICIENT FOR MAINTAINING A GOOD DISPERSION.

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

ODOR: Dimethoate formulations may produce a distinctive odor during the spray operation, but under normal conditions this odor does not persist.

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

FRUIT AND NUT CROPS

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Apples	Apple maggot Codling moth**	1 pt./100 gals. water	28 Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Apply at petal-fall and every 10 to 14 days thereafter until control is achieved. Under heavy infestations, some sting injury may occur. **Midwest and eastern states only. Do not graze livestock in treated orchards.
Apples Pears	Aphids, leaf-hoppers, mites (except rust mites)	1/2 to 1 pt./100 gals. water	28 Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Do not graze livestock in treated orchards.

Grapefruit Lemons Oranges Tangerines	Aphids	1/2 to 1 pt./100 gals. water Aerial: 1 to 2 qts./acre in 5 to 10 gals. water	15
	Mites (except rust mites)	1/2 to 1 pt./100 gals. water	15
	Scales (except black or snow)	1 to 1 1/2 pts./100 gals. water Apply as a thorough coverage spray.	45
	Thrips	1/2 to 1 pt./100 gals. water Aerial: 1 to 2 qts./acre in 5 to 10 gals. water	15
	Whiteflies	1 pt./100 gals. water	15
<p>Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom.</p> <p>Do not use on citrus seedlings. Make no more than 2 applications to mature fruit.</p> <p>Do not enter treated groves within 4 days of last applications.</p> <p>Do not graze livestock in treated orchards.</p>			
CITRUS: (California, Arizona) Non-bearing and nursery stock	Aphids, thrips	Foliar Spray: 1 pt./100 gals. 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 groves.
		Soil Drench (trees 1 to 3 years old): 2 qts./acre	Apply 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 groves.

NUTS: Pecans	Aphids, mites, leafhoppers	2/3 pt./acre	21 Do not graze livestock in treated groves.
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FIELD CROPS

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Alfalfa	Aphids, grasshoppers, leafhoppers, plant bugs including Lygus, reduction of alfalfa weevil larvae	1/2 to 1 pt./acre	This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. 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, corn rootworm adult, two-spotted spider mite	2/3 to 1 pt./acre	14 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.
	Grasshoppers	1 pt./acre	
Cotton (grown in California and Arizona)	Leafhoppers, fleahoppers, plant bugs including Lygus	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 on 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 feed treated forage or graze livestock on treated fields.
	Plant bugs including Lygus	1/2 pt./acre	
Safflower (grown in California and Arizona)	Aphids, leafhoppers, plant bugs including Lygus, thrips	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.
Sorghum (milo)	Aphids	1/2 to 1 pt./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), spider mites	1 pt./acre	
	Grasshoppers	1 pt./acre	
	Sorghum midge	1/4 to 1/2 pt./acre	

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Soybeans	Mexican beetle, spider mites, bean leaf beetle, leafhoppers, three-cornered alfalfa hopper*	1 pt./acre	21 Do not feed or graze within 5 days of last application.
	Grasshoppers	1 pt./acre	
Wheat	Aphids	1/2 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 1/2 pt./acre	
	Grasshoppers	3/4 pt./acre	

*Not registered in California

SEED CROPS

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
ALFALFA	Aphids, leafhoppers, Lygus bugs, grasshoppers, reduction of alfalfa weevil larvae	1/2 to 1 pt./acre	This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds 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

VEGETABLE CROPS

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Beans (green, lima, snap, dry)	Aphids, grasshoppers, leaf miners, Lygus bugs, mites, bean leaf beetle, Mexican bean beetle	1/2 to 1 pt./acre	Beans may be harvested on day of application. Do not feed treated vines. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom.
Broccoli	Aphids	1/2 to 1 pt./acre	7
Cauliflower	Aphids	1/2 to 1 pt./acre	7
Cabbage	Aphids, leafhoppers, leaf miners	1/2 pt./acre	7
Head Lettuce	Aphids, leafhoppers, leaf miners	1/2 pt./acre	7
Celery (Florida)	Leaf miners	1 pt./acre	7
Leaf Lettuce, Spinach, Caulards, Kale, Turnip (greens and roots), Mustard Greens, Swiss Chard, Endive (Escarole)	Aphids, leafhoppers, leaf miners	1/2 pt./acre	14

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Metals (except watermelons)	Aphids, leafhoppers, leaf miners, thrips	1 pt./acre	3
Watermelons	Aphids, leaf miners, leafhoppers	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 livestock within 21 days after last application when a stationary viner is used. Do not feed or graze when a mobile viner is used. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom.
Peppers	Aphids, leaf miners, meggots	1/2 to 2/3 pt./acre	Peppers may be harvested on day of application
Potatoes	Aphids, grasshoppers, leaf miners, leafhoppers	1/2 pt. to 1 pt./acre	Potatoes may be harvested on day of application
Tomatoes	Aphids, leaf miners, leafhoppers	1/2 to 1 pt./acre	3

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal. Keep away from heat or flame. Do not store below 45° F.

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 representatives 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.

WARRANTY AND LIMITATION OF DAMAGES

Seller warrants that this material 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 and Buyer assumes the risk of any use contrary to such directions. Seller makes no other express or implied warranty, including any other express or implied warranty of Fitness or of Merchantability, and no agent of Seller is authorized to do so except in writing with a specific reference to this warranty, in no event shall Seller's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made.

*SEVIN is a registered trademark of Rhone Poulenc.

*DIAZINON is a registered trademark of CIBA-GEIGY Corporation.

*PYDRIN is a registered trademark of E.I. duPont de Nemours and Company.

*GUTHION is a registered trademark of the parent company of Farbenfabriken Bayer GmbH Leverkusen.

*CYPREX Fruit Fungicide is a registered trademark of American Cyanamid Company.

*X-77 Spreader is a registered trademark of Chevron Chemical Company.

†Not registered in California.

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