

Reg # 1386-625

PM-14

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JUL -9 1993

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Ms. Nik Ramswick  
Universal Cooperatives, Inc.  
7801 Metro Parkway  
P. O. Box 460  
Minneapolis, MN 55440

Dear Ramswick:

Subject: Dimethoate 400  
EPA Registration No. 1386-625  
Your Application for Pesticide Amendment  
Dated May 5, 1993

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that the following changes are made to the label:

1. Remove from the HAZARDS TO HUMANS AND DOMESTIC ANIMALS section the paragraph that reads: All users, including homeowners, flaggers . . . requirements. This paragraph should be placed under the DIRECTIONS FOR USE section.
2. In accordance with PR Notice 82-1 under the directions for use for tank mixing the following statements must be added:  

"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."
3. According to our files the tolerance for cabbage will be exceeded utilizing a 3-day Preharvest Interval (PHI). The PHI for cabbage should be changed to 7 days.
4. The sentence under the directions for use for peas, "Do not feed or graze hay within 21 days after last application", must be revised so it reads:  

"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."

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the labeling is enclosed for your records.

Note that this acceptance of your label does not relieve you of your obligation to comply with the Worker Protection Standard (WPS). If any of your products are covered by the WPS, you are required to submit, and receive the Agency's approval by April 21, 1994, of a revised label reflecting the required label statements of 40 CFR 156, published in the FEDERAL REGISTER of August 21, 1992 (57 FR 38102). Under the WPS labeling regulations at 40 CFR 156, subpart K, § 156.200(c)(3), you are prohibited from distributing or selling any product within the scope of the WPS requirements after April 21, 1994, without amended labeling accepted by the Agency.

If you have any questions about this letter, contact Barbara Madden at (703) 305-5410 or (703) 305-6600.

Sincerely yours,

Robert A. Forrest  
Product Manager (14)  
Insecticide-Rodenticide Branch  
Registration Division (H7504C)

enclosure

CONCURRENCES

SYMBOL								
SURNAME								
DATE								

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# DIMETHOATE 400

A Systemic Insecticide/Miticide For Use On Many Field Crops, Vegetable Crops, Fruits, And Nuts.

**KEEP OUT OF REACH OF CHILDREN**  
**WARNING**  
See Side Panel For Additional Precautionary Statements

**ACTIVE INGREDIENT**

Dimethoate (O,O-dimethyl S-[N-(methylcarbamoyl) methyl] phosphorodithioate)

43.5%

**INERT INGREDIENTS**

56.5%

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**

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:

**BEST AVAILABLE COPY JUL - 9 1993**

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

1386-625

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**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. Wash thoroughly after handling.

All users, including homeowners, flaggers and all personnel involved with the mixing, loading and transferring operations, must wear impermeable gloves, boots or covers, long-sleeved shirt and long pants, and wide-brimmed hat. Respirators must be worn by flaggers and mixer/loaders. Pilots are exempt from these protective clothing requirements.

**STATEMENT OF PRACTICAL TREATMENT**

**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.

**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 such a manner as to directly or through drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Do not enter treated areas for 4 days unless appropriate protective clothing is worn.

Protective clothing means, at least, a hat or other suitable head covering, a long sleeved shirt and long legged trousers or a coverall type garment (all of closely woven fabric covering the body, including the arms and legs), shoes and socks.

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.

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. Inform workers of areas or fields that may not be entered without specific protective clothing, period of time field must be vacated and appropriate actions to take in case of accidental exposure. An example of such information is given under written warnings. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "WARNING. Area treated with Dimethoate (insert date) Do not enter without appropriate protective clothing for 4 days (insert State Department of Agriculture's re-entry interval, if more restrictive)."

In case of accidental exposure to pesticide spray, wash the skin thoroughly with soap and water. Remove contaminated clothing and wash before reuse. If in eyes, flush with plenty of water. If inhaled, go to an area where the pesticide has not been applied. Get medical attention if needed.

**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<sup>1</sup>, DIAZINON<sup>2</sup>, PYDRIN<sup>3</sup>, GUTHION<sup>4</sup>, malathion, parathion, dicofol, CYPREX<sup>5</sup>, Fruit Fungicide<sup>6</sup>, 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<sup>7</sup> Spreader at recommended rates will usually eliminate any incompatibility noted.

**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.

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FRUIT AND NUT CROPS

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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
	Do not apply when trees or substantial numbers of weeds in the orchard (grove) 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 applications. Do not graze livestock in treated orchards.		
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.

<b>NUTS:</b> 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, leafhoppers	1/4 to 1/2 pt./acre	14 Repeat applications should not be made at intervals closer than 14 days
	Plant bugs including Lygus	1/2 pt./acre	Do not feed treated forage or graze livestock on treated fields.
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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	beetle, spider mites, bean leaf beetle, leafhoppers, three-cornered alfalfa hopper*		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	3
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, Colards, Kale, Turnip (greens and roots), Mustard Greens, Swiss Chard, Endive (Escarole)	Aphids, leafhoppers, leaf miners	1/2 pt./acre	14

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Melons (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 hay within 21 days after last application. Do not make more than one application per season.  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, maggots	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	7

**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 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.

**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.

<sup>1</sup>SEVIN is a registered trademark of Rhone Poulenc.

<sup>2</sup>DIAZINON is a registered trademark of CIBA-GEIGY Corporation.

<sup>3</sup>PYDRIN is a registered trademark of E.I. duPont de Nemours and Company.

<sup>4</sup>GUTHION is a registered trademark of the parent company of Farbenfabriken Bayer GmbH Leverkusen

<sup>5</sup>CYPREX Fruit Fungicide is a registered trademark of American Cyanamid Company.

<sup>6</sup>X-77 Spreader is a registered trademark of Chevron Chemical Company.

<sup>7</sup>Not registered in California

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