UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460-0001

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

Glenda Haage
Registration Manager
Platte Chemical Co.
P.O. Box 667
Greeley, CO 80632-0667

NOV 15 2000

Dear Ms. Haage:

Subject: EPA Reg. No. 34704-207
Clean Crop Dimethoate 400
Label Amendment
Letter dated August 11, 2000

The label amendment referred to above, submitted in connection with the registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided you make the following changes:

1. Delete "IF HUMAN VOLUNTEERS ...SPECIFIED ON THIS LABEL" on right column, page 1. The same statement is repeated under Aerial Applications section on page 3.

2. Suggest replacing "Postharvest" with "Trees after harvest" under Cherries on page 3. Postharvest use refers to treatment of produce or commodity.

3. Replace ".. harvested on day of application" with "... harvested mechanically on day of application" in the case of Beans (Green, Lima, Snap and Dry), Garbanzo Beans, Lupine, Peas, Peppers, and Potatoes on page 4. Manul harvesting has to wait until the 48 hr REI is over.

A stamped copy of the draft label is enclosed. Submit one (1) copy of final printed labeling before you release the product for shipment. Should you have any questions, do not hesitate to contact me at 703-605-0368.

Sincerely,

S. Oonnithan, Ph.D.
Entomologist; IRB/RD(7505C)
Office of Pesticide Programs

CLEAN CROP

ACCEPTED
with COMMENTS
In EPA Letter Dated:
NOV 15 2000
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide

DIMETHOATE 400

34704-207

Organophosphate Insecticide
SYSTEMIC INSECTICIDE-MITICIDE

ACTIVE INGREDIENT:	
Dimethoate (O,O-dimethyl-S-[(methylcarbamoyl) methyl] phosphorodithioate)	43.5%
INERT INGREDIENTS:	56.5%
TOTAL	100.0%

(1 Gallon contains 4.0 pounds of Dimethoate)
This product contains petroleum distillates.

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 Below For Additional Precautionary Statements

DO NOT STORE BELOW 45°F.

EPA REG. NO. 34704-207

EPA EST. NO. 2737-KS-1[10], 34704-MS-1[53]

NET CONTENTS 2½ GALS. (9.46 L)

IHT EXP 09Y00

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May be fatal if swallowed. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Avoid contact with skin, eyes or clothing.

STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Call a physician or Poison Control Center. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol. Do not induce vomiting.
If Inhaled: Remove victim to fresh air and apply artificial respiration if indicated.
If On Skin: Wash with plenty of soap and water. Get medical attention.
If In Eyes: Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Get medical attention.
NOTE TO PHYSICIANS: Atropine is antidotal only if symptoms of cholinesterase inhibition are present. Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective as an adjunct to atropine. Use according to label directions. **FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-228-5635, EXT. 136, OR CALL COLLECT, 612-851-8180, EXT. 136.**
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 the EPA chemical resistance category selection chart.
Applicators and other handlers must wear: 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 and chemical-resistant headgear for overhead exposure. 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) or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P or HE prefilter. For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C), or a NIOSH approved respirator with any R, P or HE filter.
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 statements: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with 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.
IF HUMAN FLAGGERS ARE EMPLOYED THEY MUST WEAR THE PROTECTIVE CLOTHING AND RESPIRATOR SPECIFIED ON THIS LABEL.

USER SAFETY RECOMMENDATIONS

Users should:
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.
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 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 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 & 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

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Agricultural Use Requirements Cont'd.
covered by the Worker Protection Standard.
Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 48 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: coveralls, chemical-resistant gloves, such as: barrier laminate, butyl rubber, nitrile rubber or viton; chemical-resistant footwear plus socks, protective eyewear and chemical-resistant headgear for overhead exposure.

AERIAL APPLICATION: AUTOMATIC FLAGGING DEVICES SHOULD BE USED WHENEVER FEASIBLE.

APPLICATION THROUGH IRRIGATION SYSTEMS-CHEMIGATION

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 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 crop 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.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS
Note: Platte Chemical Co. does not encourage 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 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 backward through 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 decreased 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.

SPRINKLER CHEMIGATION (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 of 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:

a. 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.
b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
c. 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.
d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
e. 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.
f. 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.

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STORAGE AND DISPOSAL

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

Do not ship or store with food, feeds, drugs, or clothing.

Do not cut or weld metal containers.

STORAGE: Do not store below temperature of 45°F. 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. Personnel should use clothing and equipment listed under "PRECAUTIONARY STATEMENT" when handling open containers.

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: Metal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. **Plastic:** 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

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.

CLEAN CROP DIMETHOATE 400 has systemic and contact activity against a broad spectrum of piercing, sucking and chewing insects.

COMPATIBILITY: CLEAN CROP DIMETHOATE 400 is compatible in spray tank mixes with most insecticides, miticides, and fungicides, provided they are not alkaline in reaction.

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

To increase the consistency and performance of CLEAN CROP DIMETHOATE 400 when less than ideal water conditions exist (when pH is greater than pH 7) use LI-700 at 1 pint/100 gallons of spray mixture.

Spray tank mixtures of CLEAN CROP DIMETHOATE 400 with alkaline insecticides and fungicides should be applied promptly.

ODOR: CLEAN CROP DIMETHOATE 400 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 of 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 unless otherwise directed.

Crops	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 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	Aphids, Leafhoppers, Mites, (except rust mite), Pear psylla	½ to 1 pt./100 gals. water	28 Do not apply when trees or substantial numbers of weeds in the orchard are in bloom. Do not graze livestock in treated orchards.
Cherries (Preharvest) (Idaho, Oregon and Washington only)	Aphids, Cherry Fruit Fly, Mites	Dilute Applications: ½ pt./acre in a minimum of 100 gals. water; Concentrate Applications: 2 pts./acre in a minimum of 50 gals. water	21 Concentrate sprays should be used with caution to avoid fruit marking and injury. Make a single application within 7 days of adult fly emergence in the area. This single application should be made in late May or early June when the fruit are small in size. Do not feed or graze livestock on cover crops in treated orchards.
Cherries (Postharvest) (Idaho, Oregon, and Washington only)	Aphids, Cherry Fruit Fly, Mites	Dilute Applications: 1 pt./100 gal. water	Make a single application a minimum of 7 days after final harvest or apply in cases where a decision is made not to harvest due to poor fruit quality, a light crop, or unfavorable market conditions. For best results, make application before fruit hardens or drops. Do not feed or graze livestock on cover crops in treated orchards.
Grapes (Raisin, Wine, table and canning grapes)	Grape Leafhopper, Pacific Spider Mite	½ to 1 pt./100 gals. water not to exceed 400 gals per acre	28 Apply lower or higher rate depending upon vine growth density. Repeat as necessary.
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 15 to 20 gals. water	15
	Mites (except rust mite)	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 when trees or substantial number of weeds in the grove are in bloom. Do not use on citrus seedlings. Make no more than 2 applications to mature fruit. Do not graze livestock on cover crops in treated orchards.		

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CITRUS TREES
NONBEARING AND NURSERY STOCK

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

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
CITRUS: (California, Arizona) Grapefruit, Lemons, Oranges, Tangerines	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.
		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.
NUTS: Pecans	Aphids, Mites, Leafhoppers	¾ pt./acre	21 Do not graze livestock in treated groves.
VEGETABLE CROPS: Asparagus (Do not use on asparagus in California or Arizona)	Aphids, Asparagus beetles	1 pt./acre	Apply after the last harvest at no less than 7 day intervals up to a maximum of 5 pt. per acre per year. Do not apply less than 180 days before harvest.
Beans (Green, Lima Snap & Dry)	Aphids, Grasshoppers, Leafhoppers, Leaf miners, Lygus bugs, Mites, Bean leaf beetle, Mexican bean beetle	½ 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, Cauliflower	Aphids	½ to 1 pt./acre	7
Brussels Sprouts (For use in California only)	Aphids. Apply when insects first appear and repeat as needed.	Ground Equipment: 1 to 2 pts./acre is a minimum of 100 gals. of water/acre. Do not apply by air.	10 Do not exceed 6 applications per growing season. Do not feed or graze livestock in treated areas.
Cabbage	Aphids	½ to 1 pt./acre	7
Celery (Florida)	Leaf miners, Carmine mite, Two spotted spider mite	1 pt./acre	7
Garbanzo Beans*	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. 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.
Head Lettuce	Aphids, Leafhoppers, Leaf miners	½ 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
Lentils	Lygus bug	1 pt./acre	Do not apply within 14 days of harvest. Do not feed or graze treated plants. Do not make more than two applications per growing season
	Aphids	½ to 1 pt./acre	Do not make more than two applications per growing season. Do not apply within 14 days of harvest. Do not feed or graze treated plants.

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Lentils Cont'd.	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.		
Lupine*	Aphids, Lygus bugs	½ to 1 pt./acre	Apply when aphids first appear. Make only 2 applications per season. Lupine may be harvested on day of application. Do not graze forage or hay. 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.
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	½-1 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.
	This pesticide is highly toxic to bees, do not apply if bees are visitng the areas to be treated when crop or weeds are in bloom.		
Peppers	Aphids, Leaf miners, Maggots	½ to ⅔ pt./ acre	Peppers may be harvested on day of application.
Potatoes	Aphids, Grasshoppers, Leaf miners, Leafhoppers	½ pt. 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 DIMETHOATE 400 are compatible with endosulfan or malathion. Use in accordance with the manufacturers directions for control of these insects.

***Not registered for use in California.**

FIELD CROPS: Alfalfa	Aphids, Grasshoppers, Leafhoppers, plant bugs including Lygus, reduction of Alfalfa weevil larvae	½ 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	Bankgrass mites (excluding Trans-Pecos area of Texas), Aphids, Bean beetle, Corn rootworm adult* Two-spotted spider mite	¾ 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 if bees are present. Crops may be more susceptible to injury in the early reproductive stages.
	Grasshoppers	1 pt./acre	
Cotton (grown in California and Arizona)	Leafhoppers, Fleahoppers, Plant bugs including Lygus	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	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.
	Fleahoppers Plant bugs including Lygus	½ pt./acre	

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Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Safflower (grown in California and Arizona)	Aphids, Leafhoppers, plant bugs including Lygus, Thrips	½ to 1 1/3 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	½ 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.
	Bankgrass mites (excluding Trans-Pecos area of Texas), Spider mites	1 pt./acre	
	Grasshoppers	1 pt./acre	
	Sorghum midge	¼ to ½ pt./acre	
Soybeans	Mexican bean 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 (greenbugs)	½ to ¾ pt./acre	Do not apply within 14 days of grazing immature plant.
	Brown wheat mite	¼ to ½ pt./acre	Do not harvest grain within 35 days of last application.
	Grasshoppers	¾ pt./acre	Do not make more than 2 applications per season.
SEED CROPS: Alfalfa	Aphids, Leafhoppers, Lygus bugs, Grasshoppers, reduction of Alfalfa weevil larvae	½ to 1 pt./acre	This pesticide is highly toxic to bees, do not apply it 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
Grasses (Idaho Oregon & Washington only)	Winter Grain Mites, Aphids, Thrips, and Plant Bugs	Apply ½-⅔ pts./acre in a minimum of 2 gals. water	Apply by ground or aerial application. Do not graze or use seed or seed screenings for feed purposes.

ORNAMENTALS

CLEAN CROP DIMETHOATE 400 is effective in controlling many sucking, piercing and chewing insects, including aphids, psyllids, thrips, leaf miners, scales, leafhoppers, and mites, that attack valuable ornamental plantings. For proper timing of treatments for the control of specific pests on ornamental plants, consult local agricultural authorities. Apply sprays uniformly and thoroughly to foliage, except as otherwise directed, when insects or their damage is first observed. Repeat applications as needed. Do not overdose or overspray.

SOIL INJECTION: For control of pests on any Ornamental species, a soil injection application can be used. **(DO NOT APPLY THIS PRODUCT BY SOIL INJECTION IN CALIFORNIA).**

Use a 1:2 dilution (1 part CLEAN CROP DIMETHOATE 400 to 2 parts water) for all soil injections. Inject ½ fl. oz. of dilution per inch of tree circumference (measure tree circumference at approximately 4 to 5 feet above ground level). Make injections within dripline of tree and into root zone at a depth appropriate for root uptake of the species type and species growth stage to be treated.

Application can be made once per growing season or twice for difficult to control species such as ELM LEAF BEETLE. For control of ELM LEAF BEETLE, apply once shortly after trees leaf out, then follow with a second application 6 to 8 weeks late if necessary.

IMPORTANT: Use injection equipment capable of delivering metered dosage to a soil depth of at least 6 inches. Number of injections should equal inches of tree circumference. Avoid direct injections into live root tissue. Water heavily after injection, at least 2 inches of water is recommended.

Some species such as Honeysuckle, River Birch, Ornamental Cherry and Plum (Prunus spp.), Hawthorne, Japanese Lace Maple, and Asplenium are more sensitive to DIMETHOATE 400 at early growth stages. Do not apply to sensitive species that have not been established for at least 3 years. **DO NOT USE ON BEARING FRUIT TREES.**

Always wear full PPE (Personal Protective Equipment) as described on page 1 of this label for application, mixing, loading and handling of DIMETHOATE 400. Chemical resistant headgear not necessary for soil injection.

DO NOT inject into soil areas where children or pets may dig or exhume treated soil. Do not make soil injections within 20 feet of edible crop gardens.

Do not use on ornamental plants that are not listed on this label unless personal experience has shown DIMETHOATE 400 to be safe. A small test area should always be sprayed first before general use. 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.

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Arborvitae	Aphids, Bagworm, Mites	3½ ozs. in 10 gals. water	
Azaleas	Lace bug, Leaf miners, Mites, Tea scale, Whiteflies	1¾ ozs. in 10 gals. water	
Birch	Aphids, Leaf miners	1¾ ozs. in 10 gals. water	For Leaf miners, apply when leaves are expanded, about mid-May, and repeat in early July.
Boxwood	Leaf miners, Mealybug, Mites	1¾ ozs. in 10 gals. water	For Leaf miners, apply in spring when leaf miner flies first appear, or in early summer for control of larvae in the infested leaves.
Camellias	Aphids, Camellia scale, Mites, Tea scale	Foliar spray: 1¾ ozs. in 10 gals. water. Soil drench: 2 ozs. in 1 gal. water. For plants up to 6' tall. Increase rate proportionately for larger plants.	Foliar spray: apply 2 sprays, 6 weeks apart the first year, followed by annual applications soon after first growth begins in the spring. Soil drench: apply as a soil drench around the base of plants in early spring.
Carnations	Aphids, Thrips, Mites	Soil drench: 2 ozs. per 500 sq. ft. of bed or bench	Apply in sufficient water for even distribution. Water in thoroughly following application.
Cedar	Mites	3½ ozs. in 10 gals. water	
Cypress	Bactra moth larvae	1¾ ozs. in 10 gals. water	Apply as a drenching spray.
Daylillies	Aphids, Thrips	3½ ozs. in 10 gals. water	
Douglas Fir	Fir cone midge	6½ ozs. in 10 gals. water.	Make thorough coverage application when cones are closed and pendant. Use hydraulic or backpack sprayer.
Euonymus	Aphids, Scale	3½ ozs. in 10 gals. water	
Ficus Nitida	Thrips	1¾ ozs. in 10 gals. water	
Gardenias	Tea scale, Whitefly	1¾ ozs. in 10 gals. water	
Gerberas	Thrips	1¾ ozs. in 10 gals. water	
Gladiolus	Aphids, Thrips	1¾ ozs. in 10 gals. water	
Hackberry	Hackberry nipplegall psyllid, Hackberry budgall psyllid	6 ozs. in 10 gals. water	Apply prior to bud break. Do not apply to plants that have not been established for at least 3 years
Hemlock	Mites, Scale	1¾ ozs. in 10 gals. water	
Holly (English& American) not Burford variety	Leaf miners, Mites, Soft scale	1¾ ozs. in 10 gals. water	For leaf miners, apply in spring when leaf miner flies first appear, or in early summer, for control of larvae in infested leaves.
Honeysuckle	Honeysuckle aphid	3.5 ozs. in 10 gals. water	Do not apply to plants that have not been established for at least 3 years.
Iris	Aphids, Iris borer, Thrips	3½ ozs. in 10 gals. water	For borer control, spray when new leaves are 5 to 6 inches tall.

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Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Juniper and other evergreen species	Aphids, Bagworms, Midges, Mites	3½ ozs. in 10 gals. water	
Oak	Golden oak scale	3½ ozs. in 10 gals. water	
Pines	Loblolly pine sawfly, Nantucket pine tip moth	6 ozs. in 10 gals. water	Apply when most larvae are in the second and third instars.
	Zimmerman pine moth	3½ ozs. in 10 gals. water	Spray in Mid-April and/or in early September for larvae control.
Pinyon pine	Pinyon needle scale, Pinyon "pitch mass" borer, Pinyon spindle gall midge, Tip moth	25½ ozs. in 10 gals. water	Apply spray to egg masses at the base of the trees and to all rough bark and crotches that can be reached from the ground. Make this bark application when crawlers start to emerge from the eggs. Use hydraulic or backpack sprayer. Do not spray leaves or needles since phytotoxicity may result. For Spindle gall midge and Tip moth apply in mid to late spring. For Pinyon borer make application in early summer.
Poinsettia	Mites, Whitefly, Mealybug, Aphids	1¾ ozs. in 10 gals. water	
Prunus spp	Aphids, Leafhoppers, Mites, Thrips	6 ozs. in 10 gals. water	
Roses	Aphids, Leafhoppers, Mites, Thrips	6 ozs. in 10 gals. water	
Taxus (upright or spreading yew)	Fletcher scale, Mealybug, Mites	3½ ozs. in 10 gals. water	
Christmas* Trees	Balsam Twig Aphid, Blue Aphid, Bagworms, European Pine Shoot Moth, Mites, Nantucket Pine Tip Moth, Zimmerman Pine Moths	Use 1-1½ pts. per acre in a minimum of 10 gallons by air application. Use 1-1½ pints per acre in 30-50 gallons of water with a mist blower. Use 1 tablespoon in a backpack or hand held sprayer.	
Cottonwood* Trees Grown for Pulp	Leaf Beetle	Use 1⅛-4 pts. of product in 10 gallons of water per acre by air, or by dripline. Application may be repeated one more time (total of two applications). Do not apply more than two times per season.	
Douglas Fir* Seed Orchards and Breeding Orchards	For control of Douglas Fir seed and cone insects such as Contarinia, Megastigma, Dioryctoria, Barbara, Henricus (midges, worms, moths, phaloniids)	Using ground equipment, apply 1.6 to 2.1 gallons of DIMETHOATE 400 in 100 gallons of water. Spray for thorough coverage of foliage and conelets. Apply after conelet closure and when cones are in process of turning down. Repeat as necessary at the proper timing. Spray with caution, especially at higher rates for foliage phytotoxicity is possible. Spray under direct supervision of the Horticulturist in charge of the seed and breeding orchards. Seed should be used strictly for forest tree propagation or breeding purposes only. Otherwise the seed shall be destroyed in an environmentally acceptable method.	

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Ornamental Shade and Nursery trees*	Aphids, Elm Leaf Beetle	Soil Injection: Use 2.5 to 3.5 mls. of product per inch of tree circumference measured at approximately 4.5 to 5 feet above ground level.
	For aphid control, make one application. A second application 6 to 8 weeks later may be required during seasons of extreme pest pressure. Make two applications per season for elm leaf beetle; once shortly after trees leaf out, and once 6 to 8 weeks later. Some species such as River birch, Prunus, Ornamental Cherry, Hawthorne, Japanese Lace Maple and Aspens may show phytotoxic effects at label rates. DO NOT USE ON BEARING ORNAMENTAL TREES. Use a Kiontz injector with a 6-inch probe tip or similar type equipment capable of delivering metered dosage. Follow Personal Protective Equipment section of this label. Product should be inserted to a 4 to 6 inch level below ground surface. Injections should be distributed equally radially in the area around the tree trunk to drip line. Number of insertions should equal inches of tree circumference. Do not inject concentrate directly into live root tissue. Water heavily after injection. At least 2 inches of water is recommended. CAUTION - DO NOT USE ON JAPANESE MAPLES OR RED LEAF ORNAMENTAL SPP.	

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HOUSEFLIES*

RESIDUAL WALL SPRAYS: For the control of houseflies, including resistant strains, in dairy barns, hog pens, calf barns, poultry houses, and other farm buildings, apply a 1% residual spray to the ceilings, walls, and stanchions. Prepare the spray by mixing ½ pt. of DIMETHOATE 400 in 3 gallons of water. Thoroughly wet all fly-resting areas to the point of runoff. One gallon of spray will cover 500 to 1,000 square feet of surface.

DIMETHOATE 400 controls flies up to 8 weeks or longer.

Repeat applications should be made when necessary.
Remove dairy animals, calves under one month of age and poultry from building when applying residual wall sprays.

SPOT SPRAYS: For localized housefly control, apply a spray containing 4 ounces of DIMETHOATE 400 in 5 quarts of water with a knapsack or similar type sprayer to areas frequented by flies, such as doorways, and around windows. Repeat applications should be made when necessary. Good sanitation is a necessary part of any effective fly control program.
MAGGOT SPRAYS: For the control of housefly maggots, mix 4 ounces DIMETHOATE 400 in 5 quarts of water and apply as a coarse spray or with a sprinkling can to fly-breeding areas, such as poultry droppings in caged-layer houses, garbage dumps and manure piles.

Repeat application as additional manure or garbage is added.

GENERAL OUTSIDE USE: For the control of houseflies around homes and recreation areas, garbage cans, animal quarters, food-processing plants, warehouses, loading docks and refuse areas, thoroughly spray exposed surfaces, such as walls, fences, garbage and refuse containers with ½ pt. of DIMETHOATE 400 in 3 gallons of water.

Repeat applications should be made when necessary.
Do not contaminate feed and foodstuffs, drinking fountains, litter and feed troughs. Do not use in milk-processing rooms, including milk houses and milk storage rooms. Do not use in homes. Do not use in commercial food preparation areas or in edible products areas of food processing plants.

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NOTICE

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 PLATTE, THE MANUFACTURER OR SELLER. IN NO CASE SHALL PLATTE, THE MANUFACTURER OR SELLER BE LIABLE FOR 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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