



DIMETHOATE 400

ACCEPTED

JUL 16 2004

Under the Federal Insecticide, Fungicide, and Rodenticide Act,

as amended, for the pesticide registered under

34704-207

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

Organophosphate Insecticide SYSTEMIC INSECTICIDE

ACTIVE INGREDIENT:

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

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: 1-800-301-7976.**

(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-110

34704-MS-153

NET CONTENTS 2½ GALS. (9.46 L)

IHT

EXP05Y01

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

May be fatal if swallowed. Corrosive. Causes substantial but temporary eye injury. Harmful if absorbed through skin. Wear protective eyewear (goggles, face shield, or safety glasses). Do not get in eyes, on clothing, or on skin. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash clothing before reuse.

FIRST AID

| | |
|--------------------------------|--|
| If swallowed: | <ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have a person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person. |
| If inhaled: | <ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice. |
| If on skin or clothing: | <ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 - 20 minutes. • Call a poison control center or doctor for treatment advice. |
| If in eyes: | <ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice. |

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. 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.

DIMETHOATE 400
EPA REG. NO. 34704-207

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 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: Loveland Products Inc. 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 back toward 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.

noid-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:

- 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.

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.

DIMETHOATE 400
EPA REG. NO. 34704-207

3/0

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.

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

COMPATIBILITY: 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 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 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 DIMETHOATE 400 with alkaline insecticides and fungicides should be applied promptly.

ODOR: 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.

**FRUIT TREES AND VINEYARDS
NONBEARING AND NURSERY STOCK**

| 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. |

| Crops | Pests Controlled | Rate | Interval (Days) Between Last Application and Harvest |
|--|---|--|---|
| 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 (trees after harvest) Idaho, Oregon, and Washington only | Aphids, Cherry Fruit Fly, Mites | Dilute Applications: 1 pt./100 gal. water | 28 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. | | | |

DIMETHOATE 400
EPA REG. NO. 34704-207

**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: Non-bearing and nursery stock) 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. |
| CITRUS: Grapefruit, Lemons, Oranges, Tangerines (Arizona only) | Thrips | Aerial application: 4 pts/5 gals. water | Do not apply within 15 days of harvest. Do not enter treated groves within 4 days of last application. |
| | | Ground application: 4 pts./20 gals. water | |

Note: Use of dimethoate is prohibited during any time of day in any given orchard from when that orchard has 10% open blooms until such time as there has been at least 75% petal fall on the north side of the trees. Applications of dimethoate shall be limited to that period of time between one (1) hour after sunset to three (3) hours before sunrise when any one of the following conditions prevail: 1) Before the onset of petal fall, the orchard to be treated has open blooms present and these open blooms represent less than 10% of the total anticipated blooms in the orchard. 2) After the initiation of petal fall there are less than 25% of open blooms remaining in the orchard to be treated. 3) It is between the calendar dates of February 15 and May 1st.

All applications of dimethoate on citrus must be documented on Form 1080 written either by a pest control advisor, farm owner or farm manager as is normally required for custom applications of pesticides, except that private applicators may omit the "Pesticide Application Report" section. The description of the status of bloom of the orchard to be treated as it was at the time of the application shall be indicated in the section for "Label Restrictions/Special Instruction". Both private and custom applicators shall mail to the Agriculture Department's Phoenix office the original or each completed Form 1080 done in accordance with this label. Each Form 1080 shall be postmarked not later than Monday following the week in which the application was made, except when holidays intervene.

**NUTS
FOR COMMERCIAL USE ONLY**

| Crops | Pests Controlled | Rate | Interval (Days) Between Last Application and Harvest |
|--------|----------------------------------|------------|--|
| Pecans | Aphids, Mites, Leafhoppers | ½ pt./acre | 21 Do not graze livestock in treated groves. |

**VEGETABLE CROPS
FOR COMMERCIAL USE ONLY**

| | | | |
|---|--|--|--|
| 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 mechanically 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 in 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 |

| Crops | Pests Controlled | Rate | Interval (Days) Between Last Application and Harvest |
|--|--|---------------------|--|
| 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 mechanically 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 |
| Lupine* | 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. |
| | Aphids, Lygus bugs | 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. Apply when aphids first appear. Make only 2 applications per season. Lupine may be harvested mechanically 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 mechanically 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. |
| Peppers | Aphids, Leaf miners, Maggots | ½ to ¾ pt./acre | Peppers may be harvested mechanically on day of application. |
| Potatoes | Aphids, Grasshoppers, Leaf miners, Leafhoppers | ½ pt. to 1 pt./acre | Potatoes may be harvested mechanically 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.**

DIMETHOATE 400
EPA REG. NO. 34704-207

ORNAMENTALS
FOR COMMERCIAL USE ONLY

5/0

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 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 later 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 Aspens 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 |
|---|---|---------------------|---|
| 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 | ½ 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, Fleahoppers | 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. |
| | Plant bugs including Lygus | ½ pt./acre | |
| 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 | ½ 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. |

| 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. |
| Daylilies | Aphids, Thrips | 3½ ozs. in 10 gals. water | |

| Crops | Pests Controlled | Rate | Interval (Days) Between Last Application and Harvest |
|---|---|---|---|
| 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 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. |
| Grasses (Idaho, Oregon & Washington only) | Winter Grain Mites, Aphids, Thrips, and Plant Bugs | Apply ½-¾ 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. |

DIMETHOATE 400
EPA REG. NO. 34704-207

66

| Crops | Pests Controlled | Rate | Interval (Days) Between Last Application and Harvest |
|--|---|----------------------------|---|
| 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 | 1¼ ozs. in 10 gals. water | |
| Gardenias | Tea scale, Whitefly | 1¼ ozs. in 10 gals. water | |
| Gerberas | Thrips | 1¼ ozs. in 10 gals. water | |
| Gladiolus | Aphids, Thrips | 1¼ 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 | 1¼ ozs. in 10 gals. water | |
| Holly (English & American) not Burford variety | Leaf miners, Mites, Soft scale | 1¼ 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. |
| 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 | 1¼ 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 vew) | 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 1¼-4 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. |

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

| | | |
|-------------------------------------|-------------------------|--|
| 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 Kioritz 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. |
|-------------------------------------|-------------------------|--|

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

WARRANTY DISCLAIMER AND NOTICE

THE DIRECTIONS FOR USE OF THIS PRODUCT ARE BELIEVED TO BE ADEQUATE AND SHOULD BE FOLLOWED CAREFULLY. IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT DUE TO SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OR ABSENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER.

THE PRODUCTS SOLD TO YOU ARE FURNISHED "AS IS" BY LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER, AND ARE SUBJECT ONLY TO THE MANUFACTURER'S WARRANTIES, IF ANY, WHICH APPEAR ON THE LABELS TO THE PRODUCTS SOLD TO YOU. EXCEPT AS EXPRESSLY PROVIDED HEREIN, LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER MAKES NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD OR USE OF THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. EXCEPT AS EXPRESSLY STATED HEREIN, LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED BY USE OF THE PRODUCT. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND LOVELAND PRODUCTS INC.'S, THE MANUFACTURER'S OR SELLER'S TOTAL LIABILITY, SHALL BE LIMITED TO DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT. NO AGENT OR EMPLOYEE OF LOVELAND PRODUCTS INC. OR SELLER IS AUTHORIZED TO AMEND THE TERMS OF THIS WARRANTY DISCLAIMER OR THE PRODUCT'S LABEL OR TO MAKE A REPRESENTATION OR RECOMMENDATION DIFFERENT FROM OR INCONSISTENT WITH THE LABEL OF THIS PRODUCT.

IN NO EVENT SHALL LOVELAND PRODUCTS INC., THE MANUFACTURER OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES AND THE BUYER AND USER WAIVE ANY RIGHT THEY MAY HAVE TO SUCH DAMAGES.

FORMULATED FOR



P.O. BOX 1286, GREELEY, COLORADO 80632-1286