SPECIMEN LABEL

5 LB. DIMETHOATE

SYSTEMIC INSECTICIDE

ACTIVE INGREDIENT:

Dimethoate O,O-dimethyl S-(N-methyl carbamoylmethyl) phosphorothioate 57.0%

INERT INGREDIENTS 43.0%

TOTAL 100.0%

This product contains 5 lbs. Dimethoate per gallon.

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

Si usted no entiende la etiqueta, busque a alguien para se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER - PELIGRO

Corrosive causes irreversible eye damage. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes, or clothing.

STATEMENT OF PRACTICAL TREATMENT

Organophosphate

IF IN EYES - Hold eyelids open and flush with a steady gentle stream of water for 15 minutes.

IF SWALLOWED - Call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

IF ON SKIN - Wash with plenty of soap and water. Get medical attention if irritation persists.

IF INHALED - Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

NOTE TO PHYSICIAN: The product may cause cholinesterase inhibition. Antidote is Atropine.

SEE INSIDE PAMPHLET FOR DIRECTIONS FOR USE AND ADDITIONAL PRECAUTIONS

Patent No. 5,234,919

EPA REG. NO. 5905-497 SN 0698/0203

EPA EST NO.: First letters of batch code indicate producing establishment: 5905-GA-1=CG 5905-AR-1 = WA 5905-IA-1 = DI 5905-FL-1 = TF; 5905-CA-1=KC

NET CONTENTS:

MANUFACTURED BY

HELENA CHEMICAL COMPANY

225 SCHILLING BOULEVARD, SUITE 300

COLLIERVILLE TENNESSEE 38017

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 D on an EPA chemical resistance category selection chart.

Applicators and other handlers (other than mixers and loaders) must wear:

Long-sleeved shirt and long pants
Chemical-resistant gloves, such as barrier laminate or butyl rubber
Chemical-resistant footwear plus socks
Protective eyewear
Chemical-resistant headgear for overhead exposure.

Mixers, loaders and flaggers must wear:

Long-sleeved shirt and long pants
Chemical-resistant gloves, such as barrier laminate or butyl rubber
Chemical resistant footwear plus socks
Protective eyewear
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 N, 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 N, 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.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in WPS.

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 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.

Disclaimer: Always refer to the label on the product before using Helena or any other product.

SPECIMEN LABEL

This pesticide is toxic to wildlife and aquatic invertebrates. For terrestrial uses, do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

PHYSICAL OR CHEMICAL HAZARDS

Flammable. Keep away from heat and open flame.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. For any requirement 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 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 intervals. 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 or butyl rubber
chemical resistant footwear plus socks
protective eyewear
chemical-resistant headgear for overhead exposure

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses. Keep unprotected persons out of treated areas until sprays have dried.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: This product is susceptible to moisture. Therefore, if only a portion of the product is used, the container should be closed airtight immediately because additional moisture will degrade the product. Store in a cool, dry area. Do not store below 40^{O}F, as product may crystallize. Avoid storage above 95^{O}F as prolonged storage above 90^{O}F may cause loss in grade.

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: Thoroughly clean container before reuse unless this is a refillable container. If this is a refillable container and is to be refilled, do not rinse or introduce any pesticide other than **5 LB. DIMETHOATE.** Reseal and return the container to an authorized Helena Chemical Company refilling facility. If the container is not to be refilled, 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.

5 LB. DIMETHOATE is a clear liquid. When added to water, it will disperse readily and will remain physically stable with a minimum amount of agitation.
Do not use, pour, spill, or store near heat or flame.
Apply this product only as specified on this label.

Application equipment 5 LB. DIMETHOATE can be applied by any pressure sprayer that will give uniform distribution of the spray such as ground sprayers, aerial sprayers or portable sprayers.

Aerial Application:
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.

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 hard 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.

Disclaimer: Always refer to the label on the product before using Helena or any other product.

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 and provided chemigation is permitted on the label of products to be tanked-mixed.

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: This company 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.

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 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.

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 thewater 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.

GENERAL INFORMATION
This product is intended for use by the commercial grower or commercial applicator in conventional hydraulic sprayers, ground applicators or airplane sprayers. When applying by ground equipment, use the recommended amount in sufficient water for thorough coverage; by aircraft, in 3 to 10 gallons of water unless otherwise specified. Do not apply when weather conditions favor drift of spray from areas treated. Repeat applications as necessary unless otherwise specified. Consult your state experiment station or state extension service for proper timing of applications.

Dimethoate Insecticide is sensitive to Alkaline Hydrolysis and subject to degradation of active ingredient by strong acids, strong bases, and certain heavy metal oxides and salts. Degradation can cause reduced effectiveness of the pesticide performance.

DO NOT ADD DIMETHOATE TO WATER WITH PH VALUES BELOW 4.0 OR ABOVE 7.0. If necessary, water should be buffered within this range with **Buffer Xtra Strength** or **Penetrator Plus.**

CONVERSION CHART
1 cup = 8 fl. oz.
1 pint = 16 fl. oz.
1 quart = 32 fl. oz.
1 gallon = 128 fl. oz.

APPLICATION DIRECTIONS
FRUIT
APPLES: Apple Maggot*, Codling Moth - 12.8 fl. oz. per 100 gals. of water. Do not apply within 28 days of harvest. 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 infestation some sting injury may occur. Do not graze livestock in treated orchards.
APPLES, PEARS: Aphids, Leafhoppers, Leafrollers, Mites (except Rust Mites), Lygus Bugs, Pear Psylla, Stinkbugs, and Campylomma - 6.4-12.8 fl. oz. per 100 gals. water. Do not apply within 28 days of harvest. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. Do not graze livestock in treated orchards.

CITRUS, GRAPEFRUIT, LEMONS, ORANGES, TANGERINES:
Aphids - Ground equipment: 6.4-12.8 fl. oz. per 100 gals. water. Apply as an outside coverage spray. Aircraft Equipment 25.6-51.2 fl. oz. per acre in 5 to 10 gals. water. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest. **Mites (except Rust Mites) -** Ground equipment 6.4-12.8 fl. oz. per 100 gals. water. Apply as a thorough distribution coverage spray. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest. **Scales (except Black or Snow)** - Ground equipment 12.8-19.2 fl. oz. per 100 gals. water. Apply as a thorough coverage spray. Do not graze livestock in treated orchards. Do not apply within 45 days of harvest. **Thrips -** Ground equipment 6.4-12.8 fl. oz. per 100 gals. water. Apply as a mist spray. Aircraft equipment 25.6-51.2 fl. oz. per acre in 5-10 gals. water. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest. **Whiteflies -** Ground equipment 12.8 fl. oz. per 100 gals. water. Apply as a thorough distribution coverage spray. Do not graze livestock in treated orchards. Do not apply within 15 days of harvest.

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 application. Do not graze livestock or cover crops in treated orchards.

SPECIMEN LABEL

CITRUS, GRAPEFRUIT, LEMONS, ORANGES, TANGERINES (ARIZONA ONLY): Thrips - Use specified dosage in the amount of water necessary to achieve adequate coverage of foliage. The type of equipment used will determine the concentration required. Aerial: Apply up to 2.0 lbs. of a.i. (51.2 fl. oz.) in not less than 5 gals. water/acre. Ground: Apply up to 2.0 lbs. a.i. (51.2 fl. oz.) in not less than 20 gals. water/acre. Do not apply within 15 days of harvest. Do not enter treated groves within 4 days of last application.

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) Beforethe 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 of 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.

GRAPES (RAISIN, WINE, TABLE AND CANNING GRAPES): Grape Leafhopper, Pacific Spider Mite, Thrips - 38.4 - 51.2 fl. oz. per acre. Do not apply more than 51.2 fl. oz. per acre. Use higher rate where resistance is present. Dilution Rate and Method of Application - Aerial Application: Apply in 15-30 gal. of water per acre. Ground Application: Apply through concentrate spray equipment in 20-40 gals. of water per acre; or through dilute equipment in 200-400 gals. of water per acre depending upon vine growth density. Repeat applications as necessary. Do not apply within 28 days of harvest. To avoid objectionable (visible) deposits on canning or table grapes at maturity, do not apply after berries reach 0.25 inch in diameter.

NUTS

PECANS: Aphids, Mites, Leafhoppers - Ground equipment: 8.4 fl. oz. per acre. **Aphids -** Aerial equipment 8.4 fl. oz. per acre in a minimum of 5 gals. of finished spray.
Do not graze livestock in treated groves. Do not apply within 21 days of harvest.

VEGETABLE CROPS

BEANS (GREEN, LIMA, SNAP, DRY): Aphids, Grasshoppers, Leafhoppers, Leafminers, Lygus Bugs, Mites, Bean Leaf beetle, Mexican Bean Beetle - 6.4 fl. oz. per acre. Do not apply within 7 days of harvest. 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.

GARBANZO BEANS: Aphids, Grasshoppers, Leafhoppers, Leafminers, Lygus Bugs, Mites - 6.4-12.8 fl. oz. per 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 - 6.4-12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

CABBAGE: Aphids - 6.4-12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

HEAD LETTUCE: Aphids, Leafhoppers, Leaf miners - 6.4 fl. oz. per acre. Do not apply within 7 days of harvest.

CELERY (FLORIDA): Leaf miners - 12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

LEAF LETTUCE, SPINACH, COLLARDS, KALE, TURNIP (GREENS AND ROOTS), MUSTARD GREENS, SWISS CHARD, ENDIVE (ESCAROLE): Aphids, Leafhoppers, Leafminers - 6.4 fl. oz. per acre. Do not apply within 14 days of harvest.
LENTILS: Aphids, Lygus Bugs - 6.4-12.8 fl. oz. per acre Apply when insects first appear. Repeat applications as necessary. Do not apply within 14 days of harvest. 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 - 6 1/2-13 fl. oz. per acre. Apply when aphids first appear. Make only 2 applications per season. May be harvested on day of application. Do not feed or 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, Leafminers, Thrips - 12.8 fl. oz. per acre. Do not apply within 3 days of harvest.

MELONS (WATERMELONS): Aphids, Leaf miners, Leafhoppers, Maggots - 6.4-12.8 fl. oz per acre. Do not apply within 3 days of harvest.

PEAS: Aphids - 4.2 fl. oz. per acre. **Lygus Bugs -** 12.8 fl. oz. per acre. Do not apply within 7 days of harvest. 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. Make no more than one application per season to peas. 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 - 6.4-8.4 fl. oz. per acre. Do not apply within 7 days of harvest.

POTATOES: Aphids, Grasshoppers, Leaf miners, Leafhoppers - 6.4-12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

TOMATOES: Aphids, Leaf miners, Leafhoppers - 6.4-12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

SPECIMEN LABEL

Where cabbage worms and cabbage loopers are a problem, the above rates are compatible with endosulfan, malathion or parathion. Use in accordance with the manufacturer's directions for control of these insects.

FIELD CROPS

ALFALFA: Aphids, Grasshoppers, Leafhoppers, Lygus Bugs, Reduction of Alfalfa Weevil Larvae - 6.4-12.8 fl. oz. per 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 - 8.4-12.8 fl. oz. per acre. Aerial Application: Spray over the foliage when mites appear. Apply above rates in 1 or more gals. of water per acre. **Grasshoppers -** 12.8 fl. oz. per acre. Ground Application: Apply above rate in 20 to 40 gals. of water per acre. Aerial Application: Apply above rate in 1 or more gals. of water per acre. Do not apply within 14 days of harvest. Apply as necessary. Make no more than 3 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 visiting the area.
***NOTE -** Corn Rootworm Adult not registered for use in California.

COTTON (GROWN IN CALIFORNIA AND ARIZONA): Lygus Bugs, Leafhoppers, Black Fleahoppers - 6.4-12.8 fl. oz. per acre. Repeat applications should not be made at intervals closer than 14 days. Make only 2 applications per season at the higher rate. Do not feed treated forage or graze livestock on treated fields. Do not apply within 14 days of harvest.

COTTON: Aphids, Mites, Thrips, Fleahoppers, Lygus Bugs -3.2-6.4 fl. oz. per acre. Repeat applications should not be made at intervals closer than 14 days. Do not feed treated forage or graze livestock on treated fields. Do not apply within 14 days of harvest.

SAFFLOWER (GROWN IN CALIFORNIA AND ARIZONA): Aphids, Leafhoppers, Plant Bugs including Lygus and Thrips - 6.5-13 fl. oz. per acre. Repeat applications should be made at intervals closer than 14 days. Make only 2 applications per season at the higher rate.

SORGHUM (MILO): Aphids - 6.4-12.8 fl. oz. per acre. Ground application: Apply above rates in 25 to 40 gals. of water per acre. Aerial application: Apply above rates in 2 or more gals. of water per acre. **Banks grass mites (excluding Trans-Pecos area of Texas), Grasshoppers, Spider Mites** - 12.8 fl. oz. per acre. Ground application: Apply above rate in 25 to 40 gals. of water per acre. Aerial application: Apply above rate in 1 or more gals. of water per acre. **Sorghum midge** - 3.2-6.4 fl. oz. per acre. Aerial application: Apply above rates in 1 or more gals. of water per acre. Do not feed or graze within 28 days of last application. Make no more than 3 applications as needed per season.

SOYBEANS: Mexican Bean Beetle, Leafhopper, Spider Mites, Bean Leaf beetle, Three-Cornered Alfalfa Hopper* - 12.8 fl. oz. per acre. Aerial application: Apply recommended rate in a minimum of 2 gals. of water per acre. **Grasshoppers** - 12.8 fl. oz. per acre. Ground application: Apply above rate in 25 to 40 gals. of water per acre. Aerial application: Apply above rate in 1 or more gals. of water per acre. Do not feed or graze within 5 days of last application. Do not apply within 21 days of harvest.
*NOTE: Three -Cornered Alfalfa Hopper not registered for use in California.

WHEAT: Aphids (Greenbugs) - 6.4-9.6 fl. oz. per acre. **Brown Wheat Mite** - 4.2-6.4 fl. oz. per acre. **Grasshoppers** - 9.6 fl. oz. per acre. Do not apply within 14 days of grazing immature plant. Do not harvest grain within 35 days of last application. Make no more than 2 applications as needed per season.

SEED CROPS

ALFALFA: Aphids, Leafhoppers, Lygus Bugs, Grasshoppers, Reduction of Alfalfa Weevil Larvae - 6.4-12.8 fl. oz. per acre. Do not apply to alfalfa in the bloom period. Do not feed or graze livestock in treated crops, hay, threshings or stubble within 10 days of application.

Where cabbage worms and cabbage loopers are a problem, the above rates are compatible with endosulfan, malathion or parathion. Use in accordance with the manufacturer's directions for control of these insects.

ATTENTION: DO NOT USE ON SEED ONIONS, SEED CARROTS OR SEED BERMUDA GRASS.

CITRUS TREES-NONBEARING AND NURSERY STOCK

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

CITRUS (CALIFORNIA, ARIZONA) GRAPEFRUIT, LEMONS, ORANGES, TANGERINES: Aphids, Thrips - *Foliar Spray*: 12.8 fl. oz. per 100 gals. of water. Repeat applications as necessary. May be applied in the year grapefruit, lemon, orange and tangerine trees begin to bear fruit. Do not graze livestock in treated orchards. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom. ***Soil Drench (Trees 1 to 3 years old)***: 3 1/4 pints per acre applied 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 orchards. Do not apply when trees or substantial numbers of weeds in the orchard (grove) are in bloom.

MAGGOT SPRAYS

For the control of Housefly maggots, mix 3 1/4 oz. in 5 qts. 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.

SPECIMEN LABEL

Do not use in edible product area of food processing plants, restaurants or other areas where food is commercially processed. Do not use in service areas when food is exposed.

DO NOT CONTAMINATE FEED AND FOOD STUFFS, 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.

ORNAMENTALS

5 LB. DIMETHOATE is effective in controlling many sucking, piercing and chewing insects that attack valuable ornamental plantings. 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 over spray. Use only on the ornamental plants listed below.

IMPORTANT - When making soil injections, use a low pressure soil injection device. 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 this product 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.

HACKBERRY: Hackberry Nipplegall Psyllid, Hackberry Budgall Psyllid - ***Soil injection***: Use a 1:3 dilution. (1 part **5 LB. DIMETHOATE** to 3 parts water). Apply using a low-pressure injector. Inject ¾ fl. oz. of dilution, 6 inches below ground, for each 1/2 inch of trunk diameter. Make insertions within dripline of tree. Apply prior to bud break. Do not apply to plants that have not been established for at least 3 years.

HONEYSUCKLE: Honeysuckle Aphid - ***Soil injection***: Use a 1:3 dilution. Apply using a low-pressure injector. Inject 1 fl. ozs. of dilution, 6 inches beneath ground surface, for each 1/2 inch of trunk diameter. Do not apply to plants that have not been established for at least 3 years.

PINYON PINE: Pinyon Needle Scale - 20 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. **Pinyon "Pitch Mass" Borer, Pinyon Spindle Gall Midge, Tip Moth -** ***Soil injection***: Use a 1:3 dilution. Apply using a low-pressure injector. Inject 1 fl. ozs. of dilution, 6 inches below ground surface, for each 1 inch of trunk diameter. Make insertions within dripline of tree. For Spindle Gall Midge and Tip Moth, apply in mid to late spring. For Pinyon Borer make application in early summer.

DOUGLAS FIR: Fir Cone Midge - 5 ozs. in 10 gals. water. Make thorough coverage application when cones are closed and pendant. Use hydraulic or backpack sprayer.

PINES: Loblolly Pine Sawfly, Nantucket Pine Tip Moth - 4½ ozs. in 10 gals. water. Apply when most larvae are in the second and third instars. **Zimmerman Pine Moth** - 2¾ ozs. in 10 gals. water. Spray in mid-April and/or in early September for larvae control.

ARBORVITAE: Aphids, Bagworm, Mites - 2¾ ozs. in 10 gals. water.

AZALEAS: Lace Bug, Leafminers, Mites, Tea Scale, Whiteflies - 1 ozs. in 10 gals. water.

BIRCH: Aphids, Leafminers -1 ozs. in 10 gals. water. For leafminers, apply when leaves are expanded, about mid-May, and repeat in early July.

BOXWOOD: Leafminers, Mealy Bug, Mites - 1 ozs. in 10 gals. water. For leafminers, apply in spring when leafminer flies first appear, or in early summer for control of larvae in the infested leaves.

CARNATIONS: Aphids, Thrips, Mites - ***Soil drench***: 1½ ozs. per 500 sq. ft. of bed or bench. Apply in sufficient water for even distribution. Water in thoroughly following application.

CAMELLIAS: Aphids, Camellia Scale, Mites, Tea Scale - ***Foliar Spray***: 1 ozs. in 10 gals. water. Apply 2 sprays 6 weeks apart the first year, followed by annual applications soon after first growth begins in the spring. ***Soil drench***: 1½ ozs. in 1 gal. water. For plants up to 6' tall, increase rate proportionately for larger plants. Apply as a soil drench around the base of plants in early spring.

CEDAR: Mites - 2¾ 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 2½ teaspoons in a backpack or handheld sprayer. Use 12.8-19.2 fl. oz. per acre in a minimum of 10 gallons by air application. Use 12.8-19.2 fl. oz. per acre in 30 to 50 gallons of water with a mist blower. NOTE: DO NOT USE ON JAPANESE MAPLES OR RED LEAF ORNAMENTAL SPP.

CYPRESS: Bactra Moth Larvae - 1 ozs. in 10 gals. water. Apply as a drenching spray.

DAYLILLIES: Aphids, Thrips - 2¾ ozs. in 10 gals. water.

EUONYMUS: Aphids, Scale - 2¾ ozs. in 10 gals. water.
FICUS NITIDA: Thrips - 1 ozs. in 10 gals. water.

GARDENIAS: Tea Scale, Whitefly -1 ozs. in 10 gals. water.

GERBERAS: Thrips - 1 ozs. in 10 gals. water.

GLADIOLUS: Aphids, Thrips - 1 ozs. in 10 gals. water.

Disclaimer: Always refer to the label on the product before using Helena or any other product.

SPECIMEN LABEL

HEMLOCK: Mites, Scale - 1 ozs. in 10 gals. water.

HOLLY (ENGLISH & AMERICAN) NOT BURFORD VARIETY: Leafminers, Mites, Soft Scale - 1 ozs. in 10 gals. water. For leafminers, apply in spring when leafminer flies first appear, or in early summer, for control of larvae in infested leaves.

IRIS: Aphids, Iris Borer, Thrips - 2¾ ozs. in 10 gals. water. For borer control, spray when new leaves are 5 to 6 inches tall.

JUNIPER: Aphids, Bagworms, Midges, Mites - 2¾ ozs. in 10 gals. water.

OAK: Golden Oak Scale - 2¾ ozs. in 10 gals. water.

POINSETTIA: Mites, Whitefly, Mealybug, Aphids - 1 ozs. in 10 gals. water.

ROSES: Aphids, Leafhoppers, Mites, Thrips - 1 ozs. in 10 gals. water.

TAXUS (upright or spreading yew): Fletcher Scale, Mealybug, Mites - 2¾ ozs. in 10 gals. water.

TREES

COTTONWOOD TREES GROWN FOR PULP: Leaf Beetle - Use 17-25.6 fl. oz. in 10 gallons of water per acre by air, or 17-25.6 fl. oz. per acre by dripline (see chemigation section of this label). Application may be repeated two more times (total of three applications). Do not apply more than three times per season.

DOUGLAS FIR SEED ORCHARDS AND BREEDING ORCHARDS: For control of Douglas Fir Seed and Cone Insects such as Contarinia, Megastigma, Dioryctria, Barbara, Henricus (midges, worms, moths, phaloniids) - Apply at least 5 qts., but not more than 6.6 qts. (6.2 - 8.3 lbs. a.i.), in 100 gallons of water by ground equipment. Spray for thorough coverage of foliage and conelets. Application should be made after conelet closure and when cones are in the process of turning down. Repeat as necessary at the proper timing. Spray with caution, especially at higher rates for foliage (conifer needle) phytotoxicity is possible Spraying should be under direct supervision of the Horticulturist in charge of the seed or 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.

ORNAMENTAL SHADE AND NURSERY TREES: Aphids, Elm Leaf Beetle - Soil injections: 2.8 mls. of product per inch of tree circumference measured at approximately 4.5 to 5 feet above ground level.

Application should be made once per growing season (twice per season for elm leaf beetles; 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 FRUIT TREES. Use a Kioritz Injector with a 6-inch probe tip or similar type equipment capable of delivering metered dosage. A common household funnel should be used to fill the injector and chemical-resistant gloves (see Personal Protective Equipment section of this label) must be worn. 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.

CONDITIONS OF SALE - LIMITED WARRANTY AND LIMITATIONS OF LIABILITY AND REMEDIES

Read the Conditions of Sale - Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and should be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.