

revised wps 7-27-93

# 5 lb. DIMETHOATE

## Systemic Insecticide

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ACCEPTED  
with COMMENTS  
in EPA Letter Dated

MAY 6 1994

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended, for the pesticide  
registered under EPA Reg. No.  
5905-497

### 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.)

SEE INSIDE PAMPHLET FOR DIRECTIONS FOR USE AND ADDITIONAL  
PRECAUTIONS

EPA REG. NO. 5905-497

EPA EST NO.: First letters of batch code indicate producing establishment:

5905-GA-1 = CG; 5905-AR-1 = WA; 5905-IA = DI; 5905-FL-1 = TF; 5905-CA-1 = KC

"RQ" Organophosphorus Pesticides, Liquid, Toxic,  
Flammable, N.O.S. (Dimethoate/Cyclohexanone/Xylene),  
Class 6.1 (3), UN3017, PG III (ERG Guide #28)

NET CONTENTS:

MANUFACTURED BY  
HELENA CHEMICAL COMPANY  
MEMPHIS, TN 38119

## 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 gentler 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.

### 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 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.
- 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

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TC-14G).

For exposures outdoors, dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C).

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If not 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 [49 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.

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 by cleaning equipment or disposal of wastes.

#### **PHYSICAL OR CHEMICAL HAZARDS**

Flammable. Keep away from heat and open flame.

#### **CHEMIGATION PROHIBITION**

Do not apply this product through any type of irrigation system.

#### **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 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.

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:** Store in a cool, dry area. Do not store below 40°F, as product may crystallize. Avoid storage above 95°F as prolonged storage above 90°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:** Triple rinse. Then offer for recycling, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

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.

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.

#### CROPS

##### 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. \*\*Midwest and eastern states only. Do not graze livestock in treated orchards.

**Apples, Pears:** Aphids, leafhoppers, mites (except rust mites), lygus bugs, stinkbugs, and campylopus - 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.

**Grapes (raisin, wine, table and canning grapes):** Grape leafhopper, Pacific spider mite (California Only) - 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.

**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.

#### **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, leaf miners, lygus bugs, mites, Bean leaf beetle, Mexican bean beetle - 6.4 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.

**Garbanzo Beans:** Aphids, grasshoppers, leafhoppers, leaf miners, 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, leaf miners - 6.4 fl. oz. per acre. Do not apply within 14 days of harvest.

**Lentils:** Aphids, lygus bugs - 6.4-12.8 fl. oz. 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, leaf miners, thrips - 12.8 fl. oz. per acre. Do not apply within 3 days of harvest.

**Watermelons:** Aphids, leaf miners, leafhoppers - 6.4-12.8 fl. oz per acre. Do not apply within 3 days of harvest.

**Peas:** Aphids - 4.2 fl. oz. per 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. 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. Peppers may be harvested on day of application.

**Potatoes:** Aphids, grasshoppers, leaf miners, leafhoppers - 6.4-12.8 fl. oz. per acre. Potatoes may be harvested on day of application.

**Tomatoes:** Aphids, leaf miners, leafhoppers - 6.4-12.8 fl. oz. per acre. Do not apply within 7 days of harvest.

## 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) - 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.

**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)** - 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. **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. **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. Do not apply after heading.

**Soybeans:** Mexican bean beetle, spider mites, bean leaf beetle - 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



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within 5 days of last application. Do not apply within 21 days of harvest.

**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.

Do not use in edible product area of food processing plants, restaurants or other areas where food is commonly 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.

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

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, 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 is a claim for damage and in no event shall damages or any other recovery of any kind against the Company exceed the price of the product which causes the alleged loss, damage, injury, or other claim. 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.