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**ACCREDITED**  
MAY 6 1981  
Under the Federal Insecticide  
Fungicide and Fertilizer Act,  
as amended, the pesticide  
registered under EPA Reg. No. 239-1281



**ORTHO**

# DIBROM® 8 Emulsive

## Naled Insecticide

| Active Ingredients                                | By Wt. |
|---------------------------------------------------|--------|
| *Naled                                            | 58%    |
| Light Aromatic Petroleum Distillate               | 20%    |
| Inert Ingredients                                 |        |
| *1,2-dibromo-2,2-dichloroethyl dimethyl phosphate | 22%    |

Contains 8 pounds technical naled per gallon equivalent to 7.2 pounds naled.

**KEEP OUT OF REACH OF CHILDREN**

### DANGER

FOR AGRICULTURAL USE ONLY OR FOR SALE TO, USE, AND STORAGE BY SERVICE PERSONS ONLY. DO NOT STORE IN AREAS ACCESSIBLE TO CHILDREN.

DO NOT TAKE INTERNALLY. DO NOT GET IN EYES. DO NOT GET ON SKIN. SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**NET CONTENTS 1 GALLON**

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS & DOMESTIC ANIMALS DANGER

Concentrate causes eye and skin damage. Do not get in eyes, on skin or on clothing. May be fatal if swallowed or absorbed through skin. Do not breathe spray mist. Use waterproof gloves and face shield or goggles when handling concentrate. Keep children and animals off treated areas.

#### STATEMENT OF PRACTICAL TREATMENT

In case of contact, immediately remove contaminated clothing and flush skin or eyes with plenty of water. For eyes, get medical attention.

**Note to Physicians:** Emergency Information: call (415) 233-3737. Naled is a cholinesterase inhibitor. Atropine is antidotal. 2-PAM is also antidotal and may be used in conjunction with atropine. Mucosal damage may occur, and if gastric lavage is indicated, it should be performed cautiously.

#### ENVIRONMENTAL HAZARDS

This product is toxic to fish, shrimp, crab, birds and other wildlife. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Shrimp and crab may be killed at application rates recommended on this label. Do not apply where these are important resources. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service.

#### PHYSICAL OR CHEMICAL HAZARDS

**COMBUSTIBLE. KEEP OUT OF REACH OF CHILDREN. DO NOT USE OR STORE** near heat, open flame, sparks or hot surfaces. **USE ONLY IN WELL VENTILATED AREA.** Keep container closed. Clean up spills immediately. Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85°F.

**DO NOT** heat this container. Replace cap or bung. Emptied container still contains hazardous or explosive vapor or liquid.

#### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

### STORAGE AND DISPOSAL

#### PROHIBITIONS

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

Open dumping is prohibited. Do not reuse empty container.

#### STORAGE

Store in cool, dry place.

Keep pesticide in original container.

Do not put concentrate or dilute into food or drink containers.

Not for use or storage in or around the home.

Do not store diluted spray.

#### PESTICIDE DISPOSAL

Pesticide, spray mixture, or rinseate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

#### CONTAINER DISPOSAL

Triple rinse (or equivalent) and dispose of in an approved landfill or bury in a safe place.

#### GENERAL

Consult federal, state or local disposal authorities for approved alternative procedures.

### Chevron Chemical Company

Ortho Agricultural Chemicals Division/San Francisco CA 94119 Richmond CA 94804  
Product 2738 Made in U.S.A. EPA Reg. No. 239-1281-AA  
R Form 9219

## DIRECTIONS FOR USE

USE DESIGNATED AMOUNT OF PRODUCT IN THE FOLLOWING GALLONS WATER PER ACRE UNLESS OTHERWISE NOTED.

**GROUND APPLICATION—Vegetable and Field Crops:** 30 to 250 gals. Cotton: 3 to 4 gals. Deciduous Fruit Crops: 40 to 800 gals. Citrus: 400 to 1,000 gals. (On Young Fruit Plantings: 150 to 300 gals. of 15 gals. water per acre.)

**Where Recommended for AIR APPLICATION—Field Crops:** 1 to 10 gals.

A short residual contact insecticide for use on insect and mite adults and larvae present at the time of application.

Do not apply to plants or crops to be harvested within 14 days of harvest unless otherwise noted. Do not use with highly alkaline materials such as lime or bordeaux.

Do not spray on the leaves of Ornamental Cherries, Liquidambar or Chrysanthemums.

**MIXING DIRECTIONS:** Add to spray tank when 3/4 full with agitator running and continue agitation until spraying is completed. Make new dilution for each use. Wash metal equipment thoroughly after use to avoid corrosion.

**ALMONDS:** Peach Twig Borer—Apply only once during the dormant or delayed dormant period. Apply 1 pt. in combination with 1 1/2 to 2 gals. supreme type oil or 1 to 3 gals. dormant oil spray per 100 gals. water in high gallonage spray equipment. Thorough coverage is required. Observe all spray precautions.

**BEANS, LIMA BEANS (Dry Form); BEANS, LIMA BEANS, PEAS (Succulent Form):** Alfalfa Looper, Aphids, Spider Mites, Lygus, Leaf Miner; **GREEN BEANS:** Aphids, Spider Mites, Loopers, Nitidulids, Leafhoppers—1 pt. per acre in water to cover. 100 gals. per acre is preferable. Large Loopers, Stink Bugs—1 1/2 pts. per acre in water to cover. Do not apply within 1 day of harvest. Do not feed treated vines.

**BROCCOLI, CABBAGE, CAULIFLOWER, BRUSSELS SPROUTS, KALE, COLLARDS:** Imported Cabbageworm, Diamond-Back Caterpillars, Aphids—1 pt. per acre. Looper—1 pt. per acre. Do not apply within 1 day of harvest.

**CELERY:** Aphids, Loopers, Armyworms, Salt Marsh Caterpillars, Leaf Miners. Use ground application only with fine mist spray—1 pt. in 50 to 75 gals. water per acre on plants less than 3/4 grown. On larger plants use 1 1/2 pts. in 100 to 150 gals. water per acre. Do not apply within 1 day of harvest.

**COTTON:** Lygus—1 1/2 to 1 pt. per acre by air or ground. Leaf Perforator, Fleahoppers, Armyworms, Bollworms, Loopers and For Suppression of Mites—1 pt. per acre by air or ground. Apply at 7 to 10 day intervals while pests persist. **FOR HEAVY POPULATION OF LISTED INSECTS:**—Use 1 1/2 pt. per acre by air or ground in control programs with other insecticides registered for use on cotton. Do not apply after first bolls open. Do not graze livestock in treated fields.

**CUCUMBERS, SUMMER SQUASH:** Cucumber Beetles, Aphids, Spider Mites, Loopers, Thrips, Armyworms—1 pt. per acre in water to cover. Pickleworms, Leaf Miners—1 1/2 pts. per acre in water to cover. **By Air:** Use minimum of 10 gals. water per acre. May be used up to harvest.

**EGGPLANT, PEPPERS:** Aphids, Spider Mites, Bristle Beetles, Flea Beetles, Leaf Miners, Whitefly—1 pt. per acre. May be used up to 1 day before harvest.

**GRAPES:** Drosophila, Leafhoppers—1 1/2 to 3 pt. per 100 gals. water (100 to 130 gals. diluted spray per acre depending on size of vines). Use only 1 1/2 pt. per 100 gals. water on Muscat varieties. **CAUTION:** Post bloom applications can cause fruit russeting. Do not use on Italia varieties as fruit injury may occur. Do not enter vineyards for 24 hours following treatment. Do not apply within 1 day of harvest.

**HOPS:** Aphids, Spider Mites, Corn Earworm, Hop Looper, Cutworm—1 pt. per acre. Do not apply within 4 days of harvest. Do not feed hopyard waste.

**MELONS (Cantaloupes, Honeydew, Muskmelons, Watermelons), PUMPKINS, WINTER SQUASH:** Loopers, Armyworms, Leafhoppers, Spider Mites, Leaf Miners—1 to 2 pts. per acre (200 gals. diluted spray per acre). May be used 1 day before harvest. Do not apply when temperature is over 90° F.

**MUSHROOMS:** Mushroom Flies (Phorid and Sciadid Adults)—Use 1 1/2 fl. oz. per 10,000 cu. ft. as a vapor fogging or aerosol treatment. Apply with aerosols or the mal fogging devices or dilute or undiluted formulations on steam pipes or hot plates. Direct air nozzles upward in mushroom house. Do not aim nozzle at mushrooms in the beds. Keep house closed for 30 to 60 minutes, but no longer than 4 hours during treatment. Adequately ventilate after treatment period. Daily applications may be required for heavy infestations for 10 to 20 days after spawning begins. For other infestations twice weekly applications are made when necessary. Do not use within 24 hours of harvest.

**ORANGES, LEMONS, GRAPEFRUIT, TANGERINES:** Aphids, Soft Brown Scale Crawlers, Mites, Citrus Cutworms, Leaf Roller (Tortrix)—1 pt. to 100 gals. water. Thrips (Bloom)—1/2 pt. per 100 gals. water. Use up to 7 days of harvest (Calif. and Ariz.). Do not apply within 1 day of harvest. Do not enter citrus groves for 24 hours following treatment.

**PEACHES (Western States Only):** Lygus, Suppression of Mites, Peach Twig Borer, Oriental Fruit Moth—3/4 pt. to 100 gals. water. To avoid fruit spotting do not use within 30 days of harvest. Do not apply when temperature is over 90° F. Do not enter orchards for 24 hours following treatment.

**RICE:** Grasshoppers—1/2 to 3/4 pt. per acre. Apply at first sign of insects. Do not make more than 3 applications. May be used 2 days before harvest.

**SPINACH, CHARD, TURNIP GREENS:** Aphids, Loopers, Armyworms, Salt Marsh Caterpillars, Leaf Miners—Use ground application only with fine mist spray—1 pt. in 50 to 75 gals. water per acre on plants less than 3/4 grown. On larger plants, use 1 1/2 pts. in 100 to 150 gals. water per acre. May be used 1 day before harvest.

**SAFFLOWER (California and Arizona only):** Lygus—3/4 pt. per acre. **By Air:** In 3 to 10 gals. spray per acre. Do not apply within 30 days of harvest.

**STRAWBERRIES:** Leaf Roller, Spider Mites, Aphids, Omnivorous Leaf Tier, Spittlebugs—1 pt. per acre. May be used 1 day before harvest.

**SUGAR BEETS:** Spider Mites, Leafhoppers—1 pt. per acre by air or ground. **By Air:**—Use in 1 to 5 gals. water per acre. Do not apply within 2 days of harvest. Do not feed sugar beet tops.

**TOBACCO:** Hornworm—1 pt. to 100 gals. water using up to 200 gals. diluted spray per acre. Flea Beetles—1 pt. per acre in water to cover. Apply at first sign of insects. Repeat as necessary.

**TOMATOES (Field):** Fruit Flies (Drosophila)—1 pt. in no less than 40 gals. water per acre with ground sprayer, 7 to 10 gals. by air. Make first application 5 to 7 days before first picking and continue at 5 to 7 day intervals until the day before harvest. (Field and Greenhouse): Tomato Fruit Worm, Hornworms, Leaf Miners, Flea Beetles, Mites—1 pt. in 100 gals. water. Spray plants thoroughly. **For Field:**—Use up to 200 gals.

of dilute spray per acre. Do not apply when temperature is over 90° F. 1 day before harvest.

**WALNUTS:** Aphids—1 to 1 1/2 to 10 gals. water. Do not apply within 10 days of harvest. Do not spray on the leaves of the tree.

**GREENHOUSE VAPOR TREATMENT OF ROSES, OTHER ORNAMENTAL PLANTS, TOMATOES, CUCUMBERS:** Spider Mites, Adult Whiteflies, Aphids, Leafrollers, Mealybugs—1 fl. oz. per 10,000 cu. ft. when plants are dry. Apply undiluted on heat pipes (or in open pans on hot plates). Apply continuously or to intermittent sections of pipe on heat pipes. Do not use the equipment if the temperature is over 90° F. Do not use within 14 days of harvest.

Apply undiluted on heat pipes should be for every 1000 cu. ft. of space. In steam heated houses, close vents for at least 1 hour after pipes are hot. With hot water systems, close valves for at least 3 hours. Houses may be enclosed overnight following treatment. When application is made to hot pipes, wear goggles and approved respirator. Ventilate house before workers re-enter. Wear respirator when entering treated houses to ventilate. Protect bees of bees in cucumber and other houses by covering with plastic or other sheet if insect present at 100 ft. house is ventilated. Do not apply to tomatoes or cucumbers more than 1 day before harvest. **Spider Mites (Resistant and Non-resistant):** Make 3 to 4 treatments at 3 or 4 day intervals. Repeat as necessary. **Adult Whiteflies:** Make 2 applications, 1 to 2 day intervals. Repeat as necessary. **Aphids:** Apply when aphids appear. Repeat as necessary.

**WARNING:** Avoid overexposure and direct application to plants and injury may result. Whitefly, Bristlefly and Leafhopper, Rose, Pink Chomogryse Chrysanthemums, Green Wax Moth, Jew, Phosphaea and other insects may be injured by DIEROM vapor.

**FOREST AND SHADE TREES: CONIFERS (Arborvitae, Douglas Fir, Fir, Hemlock, Juniper, Pine, Spruce):** Suppression of Two-Spot and Red Spider Mites, Aphids, Spittlebugs, Zimmerman Moths, Juniper Webworms, Tussock Moths, Spruce Budworms, Adult Sierra Fir and Western Hemlock Bark Borers. **BROADLEAF TREES (Ash, Birch, Black Walnut, Box Elder, Dogwood, Elm, Evergreen Pear, Flowering Plum and Quince, Locust, Magnolia, Maple, Oak, Sycamore, Willow):** Suppression of Two-Spot and Red Spider Mites, Aphids, Leaf Miners, Thrips, Elm Leaf Beetles, California Oakworms (California only), Spring and Fall Cankerworms, Fall Webworm, Oak Webworm, and Tussock Moths—1 pt. in 100 gals. water. Use when infestation is evident. Repeat as necessary.

**FRUIT FLIES (Drosophila sp.) in and around Food Processing Plants, Loading Docks, Cull Piles and Refuse Areas, Cider Mills:**—Use 2 oz. in 2 1/2 gals. water (5 pints to 100 gals.) as a coarse spray to walls, floors, doorways, windows, refuse and cull piles where insects congregate. Apply every 5 to 7 days as necessary. Do not apply to cull fruit or refuse piles to be fed to livestock. Avoid contamination of feeds, foodstuffs and food processing machinery. Do not apply when plants are in operation or when foods are present or exposed. Do not spray surfaces which will come into contact with foods. Cover food containers during spraying.

**GNAT, STABLE FLY (Dog Flies), AND HOUSE FLY CONTROL—RESIDENTIAL AREAS, CROPS LISTED ON LABEL, SWAMPS, WOODLAND:** Consult your State Fish and Game Agency before applying this product. It is not necessary to avoid farm buildings. Make applications during peak of infestation and repeat as necessary. See crop recommendations for use limitations near harvest. This rate of application will kill shrimp. Do not apply to tidal or marsh waters which are important shrimp producing areas. **AIRCRAFT:** East—Apply 0.8 to 4 fl. oz. per acre diluted with water. Apply 2 to 8 qts. of diluted spray per acre. **West:** Apply 1.6 to 4 fl. oz. per acre diluted with water. Apply 2 to 8 qts. of diluted spray per acre. **MIST OR COLD FOG:** Use 3 to 5 qts. per 100 gals. water. Calibrate equipment (rate of travel and output) to apply 0.1 to 0.25 lb. technical naled per acre.

**ADULT MOSQUITO CONTROL—RESIDENTIAL AREAS, CROPS LISTED ON LABEL, SWAMPS, WOODLAND AND LIVESTOCK PASTURES INCLUDING DAIRY CATTLE:** Consult your State Fish and Game Agency before applying this product. Make applications during peak of infestation and repeat as necessary. See crop recommendations for use limitations near harvest. Treat shrubbery and vegetation where mosquitoes may rest. Shrubbery and vegetation around stagnant pools, marshy areas, ponds and shore lines may be treated. Direct application to water is prohibited. This rate of application will kill shrimp. Do not apply to tidal or marsh waters which are important shrimp producing areas. **AIRCRAFT:** East—Apply 0.8 to 1.6 fl. oz. per acre diluted with water. Apply 2 to 8 qts. of diluted spray per acre. **WEST:** Apply 1.6 fl. oz. per acre diluted with water. Apply 2 to 8 qts. of diluted spray per acre. **MIST OR COLD FOG:** Use 3 to 5 qts. per 100 gals. water. Calibrate equipment (rate of travel and output) to apply 0.1 lb. technical naled per acre. Do not make more than one application every 10 days to pastures or other areas where milking dairy animals are being held.

**REDUCTION OF LIVESTOCK PESTS—Gnat, Stable Fly (Dog Fly), Housefly, Mosquito; Horn Fly (Central and North Central U.S.) IN CORRALS, HOLDING PENS, FEEDLOTS AND RANGELAND CONTAINING DAIRY AND BEEF CATTLE, HOGS, SHEEP AND HORSES:** **AERIAL APPLICATION:** Apply 1 fl. oz. diluted with 8 fl. oz. of water (total of 12 fl. oz.) per acre (0.25 lb. technical naled per acre). **GROUND APPLICATION:** Use 5 pts. per 100 gals. water. Apply with a mist blower or similar equipment as a space treatment. Calibrate equipment (rate of travel and output) to apply 0.25 lb. technical naled per acre (approximately 5 gals. of diluted spray).

**CLOVER MITES, COACHES, EARWIGS AND LEAFHOPPERS—Outside Dwellings and In Lawns:** Use 1 fl. oz. in 3 gals. water. Apply to turf and to soil surfaces around flowers, shrubs, and trees for general pest cleanup.

**GRASSHOPPERS, RANGE CATERPILLARS: Rangeland:** 1/2 to 3/4 pt. per acre by air or ground. **Young Grasshoppers:** 1 pt. per acre by air or ground. **Armyworms:** 1 pt. per acre by air or ground. **By Air:**—Use in 1 to 5 gals. water per acre. Apply when hoppers hatch is completed. Repeat as necessary. Animals may be present during treatment. Do not graze lactating dairy animals on treated areas.

**CONDITIONS OF SALE:** 1. Chevron Chemical Company (Chevron) warrants that this material conforms to the chemical description on the label and is reasonably fit for use as directed hereon. Chevron neither makes nor authorizes any agent or representative to make any other warranty of FITNESS or of MERCHANTABILITY, guarantee or representation, express or implied, concerning this material.

2. Critical and unforeseeable factors beyond Chevron's control prevent it from eliminating all risks in connection with the use of chemicals. Such risks include, but are not limited to, damage to plants and crops to which the material is applied, lack of complete control, and damage caused by drift to other plants or crops. Such risks occur even though the product is reasonably fit for the uses stated hereon and even though label directions are followed. Buyer and user acknowledge and assume all risks and liability (except those assumed by Chevron under 1 above) resulting from handling, storage and use of this material.