



# DIBROM<sup>®</sup> Concentrate (INSECTICIDE)

Active Ingredient	By Wt.
*Naled . . . . .	87.4%
Inert Ingredients . . . . .	12.6%

\*1,2-dibromo-2,2-dichloroethyl dimethyl phosphate

KEEP OUT OF REACH OF CHILDREN

## DANGER

DO NOT TAKE INTERNALLY.  
DO NOT GET IN EYES.  
DO NOT GET ON SKIN.

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS

### DANGER

**CORROSIVE.** Causes irreversible eye and skin damage. May be fatal if swallowed, inhaled or absorbed through the skin. May cause allergic skin reaction. Do not get in eyes, on skin, or on clothing. When handling this material wear impervious protective clothing including gloves, apron, overshoes, chemical goggles and face shield. Do not breathe vapor or spray mist. Wear a MSHA/NIOSH approved pesticide respirator. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Remove contaminated clothing and wash before reuse.

## STATEMENT OF PRACTICAL TREATMENT

**If in eyes:** Immediately hold eyelids open and flush with a steady, gentle

Get attention

**If inhaled:** breathing, artificial

attention immediately.

**If swallowed:** touching the back of the throat with finger. If possible contact a physician, Poison Control Center or emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person. Take person and product container to the nearest medical emergency treatment center.

**If on skin:** Wash with plenty of soap and water. Get medical attention immediately.

**Note to Physicians:** Emergency Information - call 1-800-892-0099. Naled is a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (Protopam) is also antidotal and may be used in conjunction with atropine, but should not be used alone.

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, aquatic invertebrates, and wildlife. Do not apply directly to water except when used over water as labeled for adult mosquito, blackfly, or housefly control. For terrestrial uses, do not apply directly to water, or to intertidal 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.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

## 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.

DIBROM Concentrate is a special formulation for use undiluted or diluted in diesel oil to be applied for the control of mosquitoes, houseflies and certain other nuisance insects. **This product cannot be diluted with water.** If crystallization occurs, warm at 70°F until crystals disappear.

The use of DIBROM Concentrate and some grades of diesel fuel may result in precipitates which cause nozzle clogging and operational difficulties.

A technical bulletin, *DIBROM Concentrate for use in Mosquito Control Programs*, contains detailed information on equipment for ULV applications.

## DIRECTIONS

**ADULT MOSQUITO CONTROL** in Residential Areas, Municipalities, Tidal Marshes, Swamps, Woodlands, Agricultural Areas (when applied in wide-area public pest control programs sponsored by governmental entities), Livestock Pastures, Feedlots and Pastures including Dairy Cattle: It is not necessary to avoid farm buildings, dairy barns, feed or forage areas. Not for use on trees being grown for sale or other commercial use, or for commercial seed production, or for the production of timber or wood products, or for research purposes, (unless applied in wide-area public pest control programs sponsored by governmental entities). Use in agricultural areas should be in a manner as to ensure that residues do not exceed the established federal tolerance for the active ingredient in or on raw agricultural commodities resulting from use for area pest control. Treat shrubbery and vegetation where mosquitoes may rest. Shrubby and vegetation around stagnant pools, marshy areas, swamps, residential areas, municipalities, woodlands, pastures, farm buildings

and feed lots may be treated.

### ULTRA LOW VOLUME AIRCRAFT

**APPLICATION:** Apply 1/2 to 1 fl. oz. of undiluted product per acre. Use the 1 oz. rate where heavy vegetation exists, i.e., woodlands, etc. Aircraft should be equipped with a corrosion resistant spray system. Large droplets may damage certain automobile finishes. Flat fan nozzles should be positioned 45° forward and only on aircraft flying 100 mph or faster. Aircraft flying at slower speeds should be equipped with atomizing nozzles. No more than 5% of the droplets should be larger than 80 microns. Spray during periods when wind is 10 mph or less and when thermal activity is low.

**AIRPLANE APPLICATION:** Dilute 50 to 100 oz. (1.6 to 3.1 qts.) DIBROM Concentrate in 100 gals. No. 2 Fuel Oil or diesel oil. Apply at the, rate of 1 gal. diluted material per acre. This is equivalent to 0.05 to 0.10 lb. actual DIBROM per acre or dilute 1.0 fl. oz. DIBROM Concentrate with HAN (Heavy Aromatic Naphtha) to make 16 fl. oz. Apply at the rate of 16 fl. oz. of dilute mixture per acre. This is equivalent to 0.10 lb. actual DIBROM per acre.

**THERMAL FOG APPLICATION:** Dilute 3.1 qts. (100 fl. oz.) to 99 gals. No. 2 Fuel Oil or diesel oil or 10 oz. per 10 gals. oil. Apply either at the rate of 40 gals. per hour at 5 mph vehicle speed, 80 gals./hour (10 mph), or 120 gals./hour (15 mph), applying swath 300 to 400 feet wide.

### ULTRA LOW VOLUME NON-THERMAL

**GROUND APPLICATION:** Dilute 2 qts. (64 fl. oz.) of DIBROM Concentrate in soybean oil or HAN to make 5 gals. of dilute solution. Apply at the rate of 3 to 6 fl. oz. per minute at a vehicle speed of 5 mph, applying a swath 300 ft. wide; at 10 mph, deliver 6 to 12 fl. oz. per minute and at 15 mph deliver 9 to 18 fl. oz. per minute. This is equivalent to 0.01 to 0.02 lb. actual DIBROM per acre. Use the high rate and slower speed to penetrate dense vegetation. Maximum effect is produced by particles 11-20 microns in size. Mass median diameter of the droplets produced should not exceed 15 microns and no droplet should be larger than 50 microns. Excessive pressure and over atomization result in poor mosquito control.

To determine droplet size, treat glass microscope slides with a thin film of General Electric SC-87 Dri Film (a silicone aerosol product). This is accomplished by waving slides rapidly, 3 to 6 feet in front of aerosol discharge. Place prepared slides in a spray deposit area far enough away from discharge to avoid saturation. Using an ocular

micrometer, at 450x magnification, measure a reasonable sample (about 100) of droplet diameters. Multiply droplet diameter by a 0.42 spread factor to determine original droplet size. Proceed to obtain droplet size range and median diameter.

**GROUND ULV CONCENTRATE APPLICATION:**

Apply DIBROM Concentrate undiluted at the rate of 0.6 fl. oz. per minute at 5 mph; 1.2 fl. oz. per minute at 10 mph; and 1.8 fl. oz. per minute at 15 mph, applying a 300 ft. swath. These flow rates are equivalent to 0.02 lb. actual DIBROM per acre.

**CAUTION: - SPECIAL INSTRUCTION:** This application can be made only under the following conditions: 1. Application can be made only by appropriately licensed and certified personnel with public agencies or private contractors operating in conjunction with or under contract with such government agencies. 2. Application in calm air conditions is to be avoided. 3. Application is not to be made in the immediate vicinity of pedestrians. 4. Vehicles used to apply DIBROM must be air conditioned or equipped with automatic speed control flow device.

**BLACKFLIES. HOUSEFLIES. GNATS. CERTAIN OTHER NUISANCE INSECTS - SMALL FLYING MOTHS. CRANE FLIES. MIDGES. ADULT STABLE FLIES** (Dog Flies) in Residential Areas, Municipalities, Woodlands, Livestock Pastures, Feed Lots and Pastures including dairy cattle. It is not necessary to avoid farm buildings, dairy barns, feed or forage areas. Not for use on trees being grown for sale or other commercial use, or for commercial seed production, or for the production of timber or wood products, or for research purposes, (unless applied as wide-area public pest control programs sponsored by governmental entities).

**THERMAL FOG APPLICATION:** Dilute 1 gal. to 99 gals. of No. 2 Fuel Oil or diesel oil or 13 oz. per 10 gals. oil. Apply at a rate of 40 gals. per hour output at an average vehicle speed of 5 mph, applying swath 300 to 400 feet wide. **AIRPLANE APPLICATION:** Dilute 100 to 230 fl. oz. (3/4 to 1 3/4 gals.) DIBROM Concentrate in 100 gals. No. 2 Fuel Oil or diesel oil. **Smaller insects - Gnats and Midges:** 3/4 to 1 gal. **Houseflies, Flying Moths:** 1 to 1 3/4 gals. Apply 1 gal. diluted material per acre. This is equivalent to 0.1 to 0.2 lb. actual DIBROM per acre. **Suppression of Blackflies:** Dilute 1.5 fl. oz. DIBROM Concentrate

with 14.5 fl. oz. HAN. Apply at the rate of 16 fl. oz. diluted mix per acre. This is equivalent to 0.16 lb. actual DIBROM per acre.

**HORN FLIES (Range Cattle): AIRPLANE APPLICATION:** Apply 2 to 4 fl. oz. DIBROM Concentrate undiluted per acre. Use higher rate for heavier fly populations. This is equivalent to 0.2 - 0.4 lb. actual DIBROM per acre.

**SUPPRESSION OF DEER FLIES: AIRPLANE APPLICATION:** Apply 1 to 2 fl. oz. DIBROM Concentrate undiluted per acre. Use higher rate in denser vegetation. This is equivalent to 0.1 - 0.2 lb. actual DIBROM per acre.

**Note:** Concentrate may corrode metal spray or mixing equipment. Flush all equipment thoroughly with aromatic solvent after use.

**Do not apply under conditions involving possible drift to food, forage or other plantings that might be damaged or the crops thereof rendered unfit for sale, use or consumption.**

## **STORAGE AND DISPOSAL PROHIBITIONS**

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Open dumping is prohibited.

### **STORAGE**

Keep pesticides in original container. Do not put concentrate or dilute into food or drink containers. For help with any spill, leak, fire or exposure involving this material, call day or night 1-800-892-0099.

### **PESTICIDE DISPOSAL**

This product is 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 (or equivalent). Do not reuse container. 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. Dispose of in a sanitary landfill or by other procedures allowed by State and local authorities.

**IMPORTANT INFORMATION. READ BEFORE USING PRODUCT.**

**LIMITED WARRANTY:** 1. Valent U.S.A. Corporation warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. Valent does not make nor authorizes any agent or representative to make, any other warranty, guarantee or representation, express or implied, concerning this product. Specifically, NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IS MADE.

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

above) resulting from handling, storage, and use of the product.

3. Precautions stated on the labeling should be followed to avoid hazardous exposure to the product.

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Manufactured for:

**Valent U.S.A. Corporation**

Walnut Creek, CA 94596-8025

Made in U.S.A.

Form SPC10200E0.1 960906

EPA Reg. No. 59639-19

EPA Est. 5481 -CA-1

Information contained in this booklet is accurate at the time of printing. Since produce testing is a continuous process, please read and follow the directions on the product label for the most current directions and precautionary statements.

**For More Information call:**

**1-800-89-VALENT (Professional Products)**

**9600-DIB-0004**