



# DIBROM<sup>®</sup>

## 14 Concentrate

**ACCEPTED**  
**SEP 15 1992**  
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 59639-19

**(INSECTICIDE)**

Active Ingredient  
\* Naled

Inert Ingredients

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

Contains 14 pounds technical naled per gallon equivalent to 12.6 pounds naled

DIBROM<sup>®</sup> - Reg. TM of Chevron Chemical Company for naled insecticide

By Wt  
85%  
15%

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER**

**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 (3.785 LITRES)**

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Apply at the rate of 16 fl oz diluted mix per acre. This is equivalent to 0.2-0.4 lb actual DIBROM Concentrate undiluted per acre.  
CAUTION: Apply 1 to 2 fl oz DIBROM Concentrate undiluted per acre equivalent to 0.1-0.2 lb actual DIBROM per acre.  
Flush all equipment thoroughly with aromatic solvent to food, forage or other plantings that might be damaged or consumption.

### E AND DISPOSAL

age, disposal or cleaning of equipment

nk containers  
olving this material, call day or night 1-800-457-2022.

posal of excess pesticide, spray mixture, or rinsate is a violation  
sed of by use according to label instructions, contact your State  
he Hazardous Waste representative at the nearest EPA Regional

er. Dispose of in a sanitary landfill or by other procedures allowed

### WARRANTY

warrants that this product conforms to the chemical description  
average conditions when used strictly in accordance with the  
nor authorizes any agent or representative to make, any other  
or implied, concerning this product. Specifically, NO IMPLIED  
FOR ANY PARTICULAR PURPOSE IS MADE.

nt's control prevent it from eliminating all risks in connection with  
are not limited to, damage to plants and crops to which product  
ding and application of this product, and damage caused by drift  
though the product is reasonably fit under average conditions for  
label directions are followed. Buyer and user acknowledge and  
umed by Valent under 1 above) resulting from handling, storage,

followed to avoid hazardous exposure to the product

Handwritten marks

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, hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention immediately.

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration and get medical attention immediately.

If swallowed, drink 1 or 2 glasses of water (or milk) and induce vomiting by 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 1-800-457-2022. 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. 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.

**PHYSICAL OR CHEMICAL HAZARDS**

**COMBUSTIBLE. KEEP OUT OF REACH OF CHILDREN. DO NOT USE ON 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.**

DIBROM <sup>14</sup> 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° until crystals disappear.

**SPECIAL MIXING DIRECTIONS: (Except CA)** The use of DIBROM <sup>14</sup> Concentrate and some grades of diesel fuel may result in precipitates which cause nozzle clogging and operational difficulties. To prevent this, DIBROM <sup>14</sup> Concentrate should be used with VALENT Additive. See VALENT Additive label for recommended rates.

A technical bulletin, Operating Manual For Ultra Low Volume Application of DIBROM <sup>14</sup> Concentrate, is available for detailed information on equipment for ULV applications.

**DIRECTIONS**

**ADULT MOSQUITO CONTROL** in Residential Areas, Municipalities, Tidal Marshes, Swamps, Woodlands, Livestock Pastures, Feed Lots and Pastures including Dairy Cattle. It is not necessary to avoid farm buildings, dairy barns, feed or forage areas. 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.

**AIRCRAFT APPLICATION:** Dilute 50 to 100 oz. (1.6 to 3.1 qts.) DIBROM <sup>14</sup> 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 0.1 lb. actual DIBROM per acre or dilute 10 fl. oz. DIBROM <sup>14</sup> 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 <sup>14</sup> 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 Dr. 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 <sup>14</sup> 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 INSTRUCTIONS:** 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. **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. **AIRCRAFT APPLICATION:** Dilute 100 to 230 fl. oz. (7.4 to 13.4 gals.) DIBROM <sup>14</sup> 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 <sup>14</sup> Concentrate with 10 to 16 lb. actual DIBROM per acre. **HORN FLIES (Range Cattle): AIRPLAN** Use higher rate for heavier fly populations. **SUPPRESSION OF DEER FLIES - AIRPLAN** Use higher rate in denser vegetation. **Note:** Concentrate may corrode metal vent after use.

Do not apply under conditions in which the crops thereof rendered unfit for

**PROHIBITIONS**

Do not contaminate water, food or feed. Open dumping is prohibited.

**STORAGE**

Keep pesticide in original container. Do not put concentrate or dilute material for help with any spill, leak, fire or explosion.

**PESTICIDE DISPOSAL**

This product is acutely hazardous to humans. Pesticide or Environmental Control Office for guidance.

**CONTAINER DISPOSAL**  
Triple rinse (or equivalent). Do not reuse by State and local authorities.

**IMPORTANT INFORMATION. READ BEFORE LIMITED WARRANTY:** Valent U.S.A. on the label and is reasonably fit for directions on the labeling. Valent does not warrant, guarantee or represent any WARRANTY OF MERCHANTABILITY OR FITNESS FOR USE. Critical and unforeseeable factors in the use of this product. Such risks in its applied, lack of complete control on other plants or crops. Such risks of the uses stated on the labeling and to assume all risks and liability (except and use of the product). 3. Precautions stated on the labeling.

Manufactured for Valent U.S.A. Corporation © 1990 Walnut Creek CA 94596-8025 R Form 249-C Made in U.S.A. EPA Reg. No. 59639-19-AA

**BEST AVAILABLE COPY**

**DIRECTIONS**

**AIRPLANE MOSQUITO CONTROL** in Residential Areas, Municipalities, Tidal Marshes, Swamps, Woodlands, Livestock Pastures, Feed Lots and Pastures including Dairy Cattle. It is not necessary to avoid farm buildings, dairy barns, feed or forage areas. 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 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.

**AIRCRAFT APPLICATION:** Dilute 50 to 100 oz (1.6 to 3.1 qts) DIBROM J 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 1 lb. actual DIBROM per acre or dilute 10 fl. oz. DIBROM J 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 J 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 J 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 INSTRUCTIONS:** 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. **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. **AIRCRAFT APPLICATION:** Dilute 100 to 200 fl. oz. (3.1 to 6.2 gals.) DIBROM J 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

15 fl. oz. DIBROM J 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 J Concentrate undiluted per acre. Use higher rate for heavier fly populations. This is equivalent to 0.2 to 0.4 lb. actual DIBROM per acre.

**SUPPRESSION OF DEER FLIES: AIRPLANE APPLICATION:** Apply 1 to 2 fl. oz. DIBROM J Concentrate undiluted per acre. Use higher rate in denser vegetation. This is equivalent to 0.1 to 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 pesticide 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 1-800-457-2022.

**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. Dispose of in a sanitary landfill or by other procedures allowed by State and local authorities.

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

**LIMITED WARRANTY:** 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 the 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.

Manufactured for  
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R Form 249 C. Made in U.S.A.  
EPA Reg. No. 59639 19 AA

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