

**RESTRICTED USE PESTICIDE**

**DUE TO EYE AND SKIN CORROSIVITY HAZARD**

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's Certification.

**DIBROM® CONCENTRATE**

**INSECTICIDE**

FOR USE ONLY BY FEDERAL, STATE, TRIBAL, OR LOCAL GOVERNMENT OFFICIALS RESPONSIBLE FOR PUBLIC HEALTH OR VECTOR CONTROL, OR BY PERSONS CERTIFIED IN THE APPROPRIATE CATEGORY OR OTHERWISE AUTHORIZED BY THE STATE OR TRIBAL LEAD PESTICIDE REGULATORY AGENCY TO PERFORM ADULT MOSQUITO CONTROL APPLICATIONS, OR BY PERSONS UNDER THEIR DIRECT SUPERVISION. NOT FOR USE IN AND AROUND THE HOME BY HOMEOWNERS OR PROFESSIONAL APPLICATORS.

**ACTIVE INGREDIENT:**

Naled (1,2-dibromo-2,2-dichloroethyl dimethyl phosphate) ..... 87.4%

**INERT INGREDIENTS:**..... 12.6%

**TOTAL:**..... 100.0%

Contains 13.2 pounds naled per gallon.

Contains petroleum distillates.

**KEEP OUT OF REACH OF CHILDREN  
DANGER / PELIGRO**

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

**FIRST AID**

**Organophosphate**

<b>If in eyes:</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently from the side of the eye with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"> <li>• Immediately call a poison control center or doctor.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth unless individual is contaminated with product.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>

**EMERGENCY INFORMATION**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**FOR THE FOLLOWING EMERGENCIES, PHONE 24 HOURS A DAY:**

For Medical Emergencies phone:.....1-888-681-4261

For Transportation Emergencies, including spill, leak or fire, phone: CHEMTREC® .....1-800-424-9300

For Product Use Information phone: AMVAC® .....1-888-462-6822

**NOTE TO PHYSICIAN**

Naled is an organophosphate cholinesterase inhibitor. Contains petroleum distillates. 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. Probable mucosal damage may contraindicate the use of gastric lavage. May pose an aspiration pneumonia hazard.

SEE SIDE/BACK PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

EPA Reg. No. 5481-480

Net Contents:



AMVAC Chemical Corporation  
4695 MacArthur Court, Suite 1200  
Newport Beach, CA 92660 U.S.A.

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## PRECAUTIONARY STATEMENTS

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### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER. CORROSIVE.** Causes irreversible eye and skin damage. Causes skin burns. May be fatal if swallowed. Harmful if inhaled or absorbed through the skin. Do not get in eyes, on skin, or on clothing. Do not breathe vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, and Viton®.

Mixers, loaders, and other handlers must wear:

- Protective eye wear (goggles, face shield, or safety glasses)
- Long-sleeved shirt and long pants
- Socks plus shoes
- Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber, or Viton, selection category E) and apron when mixing or loading.

See engineering controls for additional requirements.

In addition, mixers and loaders must:

- Have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown, the PPE specified below for handlers engaged in those activities for which use of an engineering control is not possible.

Mixers, loaders, applicators (except aerial applicators in a cab/cockpit) and other handlers engaged in those handler activities for which use of an engineering control is not possible, such as cleaning up a spill or leak and cleaning or repairing contaminated equipment, must wear:

- Protective eye wear (goggles, face shield, or safety glasses)
- Coveralls over long-sleeved shirt and long pants
- Chemical-resistant gloves
- Chemical-resistant footwear plus socks
- Chemical-resistant apron if exposed to the concentrate
- Chemical-resistant headgear for overhead exposure
- A respirator with an organic vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23G), 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 R, P, or HE prefilter. Please note that N designation for respirator filters does not apply when application is made with oils.

## USER SAFETY REQUIREMENTS

- Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water.
- Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

## ENGINEERING CONTROLS

- Mixers and loaders supporting aerial applications must use a closed system designed by the manufacturer to enclose the pesticide to prevent it from contacting handlers or other people *AND* the system must be functioning properly and must be used and maintained in accordance with the manufacturer's written operating instructions.
- The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment.
- At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to not more than 2 mL per disconnect point.

In addition, mixers and loaders must:

- Wear the personal protective equipment required in the PPE section of this labeling for mixer/loaders.
- Wear protective eyewear if the system operates under pressure.
- Be provided and have immediately available for use in case of an emergency, such as a broken package or spill, the PPE specified in the PPE section of this labeling for handlers engaged in those activities for which use of an engineering control is not possible.

Aerial applicators in a cab/cockpit must:

- Be provided and have immediately available for use in case of an emergency repair of the application equipment, the PPE specified in the PPE section of this labeling for handlers engaged in those activities for which use of an engineering control is not possible.
- Take off any PPE that was contaminated before entering or reentering the cab/cockpit.
- Store all such PPE in a closed, chemical-resistant container, such as a plastic bag, to prevent contamination of the inside of the cab/cockpit.
- NOTE: Aerial applicators are not required to use an enclosed cab/cockpit and are not required to wear PPE while in the cab/cockpit.

### User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE 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.

It is recommended that any worker displaying clinical signs of cholinesterase-inhibition, such as headaches, nausea, and dizziness have an immediate physical examination including appropriate cholinesterase measurements. If initial examination was not conducted by a board-certified person who is certified in occupational health, then a separate examination should be conducted within 24 hours by a person so certified.

## ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, aquatic invertebrates, and wildlife. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. Before making the first application in a season, consult with the primary State agency responsible for regulating the pesticide to determine if permits are required or regulatory mandates exist. Do not apply over bodies of water (e.g., lakes, swamps, rivers, permanent streams, natural ponds, commercial fish ponds, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement

of applied material away from the water in order to minimize incidental deposition into the water body. Do not contaminate bodies of water when disposing of equipment washwaters or rinsate.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. To minimize hazard to bees, it is recommended that the product is not applied more than two hours after sunrise or two hours before sunset, limiting application to times when bees are least active. Do not apply this product or allow it to drift to blooming crops or weeds while bees are visiting the treatment area, except when applications are made to prevent or control a threat to public and/or animal health as determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or the tribe during a natural disaster recovery effort.

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## DIRECTIONS FOR USE

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Before making the first application of the season, consult with the primary State agency responsible for regulating the use of pesticides to determine if permits are required or regulatory mandates exist.

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.**

### TANK MIXES

NOTICE: Tank mixing or use of this product with any other product shall be the exclusive risk of user, applicator and/or application advisor. Read and follow the entire label of each product to be used in the tank mix with this product.

DIBROM Concentrate is a special formulation for the control of mosquitoes, flies and certain other nuisance insects. **This product cannot be diluted with water.**

## APPLICATION RESTRICTIONS

For application by, or under the supervision of, personnel certified/trained in public health pest control or mosquito control. For each application, a record must be kept of:

- Date, time and areas where application occurred
- Type and size of spray nozzle used
- Dilution and application rate
- Speed of application vehicle
- A description of insecticide delivery system used for the specific application
- Climate factors (e.g., ambient temperature, wind speed/direction) as determined using reliable means
- Employees involved in mixing, loading and applying DIBROM Concentrate.

These records must be kept by the responsible public agency or their designee for a minimum of two years using storage methods that will allow the records to be easily retrieved.

Any system used to apply this product must be capable of providing the correct droplet size as specified below. Likewise, all applications must use the correct droplet size as specified below. Careful attention to directions concerning nozzles, nozzle positioning, air speed and droplet size is essential to avoid unwanted effects. Under-atomization produces large droplets that will quickly fall to the ground, while over-atomization produces finer droplets which either evaporate, dissipate, or drift in an unanticipated manner. Correct droplet size is critical to ensure effective mosquito control.

The entire spray system must be inspected before each operation to correct any leaks or obstructions, to detect whether the nozzle, hoses, or other parts are worn and need replacement, to ensure that the flow is properly calibrated and to determine that adequate pressure is being maintained. Adequate cleaning and maintenance of the unit must be performed to ensure that the entire system is operating properly. Spray system components essential for correct droplet size must be cleaned or replaced as needed to ensure correct droplet size.

Spray during periods when ground level wind speed is equal to or greater than 1 mph. Apply when thermal activity is low. Do not apply when ambient temperature is less than 50°F.

Do not apply when it is raining in the treatment area.

Treatment of a site must be based on pest surveillance results. Do not treat any site more than 1 time per day. Do not treat any site with more than 2 fl. oz. of undiluted DIBROM Concentrate per acre within a 7 day period and the amount of undiluted DIBROM Concentrate applied to any site must not exceed 104 fl. oz. (10.73 pounds of naled a.i./acre) per year. More frequent treatments may be made to prevent or control a threat to public and/or animal health as determined by a state, tribal or local health or vector control agency on the basis of documented evidence of disease causing agents in vector mosquitoes or the occurrence of mosquito-borne disease in animal or human populations, or if specifically approved by the state or tribe during a natural disaster recovery effort.

#### **Aerial Application:**

Spray equipment must be adjusted so that the volume median diameter produced is less than 60 microns ( $D_v 0.5 < 60 \mu\text{m}$ ) and that 90% of the spray is contained in droplets smaller than 115 microns ( $D_v 0.9 < 115 \mu\text{m}$ ). The effects of flight speed and, for non-rotary nozzles, nozzle angle on the droplet size spectrum must be considered. Directions from the equipment manufacturer or vendor, pesticide registrant, or a test facility using a wind tunnel and laser-based measurement instrument must be used to adjust equipment to produce acceptable droplet size spectra. Application equipment must be tested at least annually to confirm that pressure at the nozzle and nozzle flow rate(s) are properly calibrated.

#### **OPERATIONAL USE INSTRUCTIONS**

- All equipment used in the mixing or application of DIBROM Concentrate must be constructed of corrosion-resistant materials. Stainless steel, bronze, brass, fiberglass, polypropylene and rigid PVC have all proven to be adequately resistant to the effects of DIBROM Concentrate when properly maintained and inspected.
- Use of Teflon® or Viton seals is recommended. Even when these materials are used to construct a spray system, a careful maintenance program involving flushing, cleansing and constant inspection must be followed. Avoid use of steel or galvanized steel.
- Strain DIBROM Concentrate as it is being loaded. Use a 100 mesh stainless steel or nylon screen. If product crystallization occurs, warm at 80°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.
- Flushing the system following application is required. Use of heavy aromatic naphtha "Jet A" aircraft fuel, Aromatic 150, Aromatic 200, and Aromatic 200ND have been successful.
- DIBROM Concentrate must be applied using the correct droplet size. Over-atomization produces finer droplets which either evaporate or dissipate too quickly and become unavailable for mosquito contact. If applied incorrectly, DIBROM Concentrate will spot certain automobile paint finishes. Careful attention to recommendations concerning nozzles, nozzle positioning, air speed and droplet size is essential to avoid paint spotting.

#### **ADULT MOSQUITO CONTROL**

**Adult Mosquito Control in Residential Areas, Municipalities, Tidal Marshes, Swamps, Woodlands, and Agricultural Areas (when applied in wide-area public pest control programs sponsored by governmental entities):** It is not necessary to avoid farm buildings, dairy barns, pastures, feed or forage areas. Use in agricultural areas must 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 wide area pest control. Treat shrubbery and vegetation where mosquitoes may be present. Shrubby and vegetation around stagnant pools,

marshy areas, swamps, residential areas, municipalities, woodlands, pastures, farm buildings and feedlots may be treated.

**Ultra Low Volume (ULV) Aerial Application:** Apply ½ to 1 fl. oz. of undiluted product per acre (equivalent to 0.05 to 0.1 lb. a.i./acre). Use the 1 fl. oz. rate where heavy vegetation exists; i.e., woodlands, etc.

**Dilute Aerial Application:** Apply ½ to 1 fl. oz. of undiluted DIBROM Concentrate per acre in a diluted spray solution (equivalent to 0.05 to 0.1 lb. a.i./acre). Use a diluent that is safe for use with the equipment being used and which will not harm the area being treated. Use a diluent that is compatible with Dibrom Concentrate. Test compatibility prior to using any diluent.

#### **HOUSEFLIES, GNATS, CERTAIN OTHER NUISANCE INSECTS AND SUPPRESSION OF BLACKFLIES**

**Small Flying Moths, Flies (including but not limited to Crane Flies, Adult Stable Flies, Dog Flies, Biting Flies, Filth Flies), Midges in Residential Areas, Municipalities, Tidal Marshes, Swamps, Woodlands, and Agricultural Areas (when applied in wide-area public pest control programs sponsored by governmental entities):** It is not necessary to avoid farm buildings, dairy barns, and feed or forage areas. Apply 1 fl. oz. of undiluted DIBROM Concentrate per acre -(equivalent to 0.1 lb. a.i./acre).

#### **SUPPRESSION OF DEER FLIES AND OTHER TABANIDS**

**Deer Flies in Residential Areas, Municipalities, Tidal Marshes, Swamps, Woodlands, and Agricultural Areas (when applied in wide-area public pest control programs sponsored by governmental entities):** It is not necessary to avoid farm buildings, dairy barns, and feed or forage areas.

**Aerial Application:** Apply 1 fl. oz. of undiluted DIBROM Concentrate per acre (equivalent to 0.1 lb. a.i./acre).

#### **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Keep pesticides in original container. Do not put concentrate into, or dilute in food or drink containers. For help with any spill, leak or fire involving this material, call day or night 1-800-424-9300 or for help with any exposure involving this material, call day or night 1-888-681-4261.

**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 HANDLING:** Returnable Container. Nonrefillable container. Do not reuse or refill this container. This container is a dedicated, single-product returnable container. Return empty container to seller at location designated by seller as a collection point. Do not break seals, add anything to container or open container after use. Do not rinse or contaminate empty container. Do not dispose of un-tampered empty container or use it for any other purposes. Any evidence of broken seals or other tampering or adding anything to the container renders it unfit for return. In such case, it is the obligation of the holder of the container to dispose of it properly or offer for recycling, if available.

**It is required that this product be used in a CLOSED SYSTEM. This container may require a tank adapter. For questions regarding tank adapters, call AMVAC Customer Service at 1-888-462-6822 (1-888-GO-AMVAC).**

#### **LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants (a) that this product conforms to the chemical description on the label; (b) that the directions, warnings, and other statements on this label are based upon responsible experts' evaluations of reasonable tests of effectiveness, of toxicity to laboratory animals and to plants and residues on food crops, and upon reports of field experience. Tests have not been made on all varieties of food crops and plants, or in all states or under all conditions. THIS WARRANTY DOES NOT EXTEND TO THE USE OF THIS PRODUCT CONTRARY TO LABEL INSTRUCTIONS, OR UNDER CONDITIONS NOT REASONABLY FORESEEABLE.

**THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SET FORTH HEREIN. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE, TO MAKE ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF QUALITY OR PERFORMANCE. THIS WARRANTY DOES NOT EXTEND TO, AND THE BUYER SHALL BE SOLELY RESPONSIBLE FOR, ANY AND ALL LOSS OR DAMAGE WHICH RESULTS FROM THE USE OF THIS PRODUCT IN ANY MANNER WHICH IS INCONSISTENT WITH THE LABEL DIRECTIONS, WARNINGS OR CAUTIONS.**

**TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT BASED IN TORT, CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW MANUFACTURER OR SELLER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.**

AMVAC offers this product, and Buyer accepts it, subject to the foregoing Limited Warranty which may be varied only by agreement in writing signed by an authorized representative of AMVAC.

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AMVAC Chemical Corporation  
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SPECIMEN



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Dibrom Concentrate</b>
<b>Other means of identification</b>	
<b>SDS number</b>	260
<b>Product registration number</b>	5481-480
<b>Recommended use</b>	Organophosphate insecticide.
<b>Recommended restrictions</b>	This is a Restricted Use Pesticide and is for use by licensed applicators only. No other uses are advised. Keep out of the Reach of Children!
<b>EPA Registration number</b>	EPA: 5481-480
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	AMVAC Chemical Corporation
<b>Address</b>	4685 MacArthur Court Suite 1200 Newport Beach, CA 92660
<b>Telephone</b>	AMVAC Chemical Corp 949-260-1200 AMVAC Chemical Corp 949-260-6270(FAX)
<b>Website</b>	www.Amvac-Chemical.com
<b>E-mail</b>	CustServ@Amvac-Chemical.com
<b>Emergency phone number</b>	Medical 888-681-4261 CHEMTREC® 800-424-9300 (USA+Canada) Product Use 888-462-6822 CHEMTREC® (Outside USA) +1-703-527-3887

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Acute toxicity, oral	Category 3
	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
	Sensitization, skin	Category 1
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



**Signal word**

Danger

<b>Hazard statement</b>	<p>Causes severe skin burns and eye damage.          Causes serious eye damage.          Toxic if swallowed.          Harmful if inhaled.</p> <p>May cause an allergic skin reaction.          Combustible liquid.          Very toxic to aquatic life.          Very toxic to aquatic life with long lasting effects.</p>
<b>Precautionary statement</b>	
<b>Prevention</b>	<p>Do not breathe mist or vapor.          Do not get in eyes, on skin, or on clothing.          Wash thoroughly after handling.          Do not eat, drink or smoke when using this product.          Use only outdoors or in a well-ventilated area.          Wear protective gloves/protective clothing.          Wear eye/face protection.          Contaminated work clothing must not be allowed out of the workplace.</p>
<b>Response</b>	<p>If swallowed: Immediately call a poison center/doctor.          Rinse mouth.          If on skin: Wash with plenty of water.          Take off contaminated clothing and wash before reuse.          Immediately call a POISON CENTER or doctor/physician.          If inhaled: Remove person to fresh air and keep comfortable for breathing.          If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.          Immediately call a poison center/doctor.          Specific treatment is urgent (see this label).          Collect spillage.</p>
<b>Storage</b>	<p>Store in a well-ventilated place. Keep container tightly closed.          Store locked up.</p>
<b>Disposal</b>	<p>Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
<b>Hazard(s) not otherwise classified (HNOC)</b>	<p>None known.</p>
<b>Supplemental information</b>	<p>This is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced in section 15. The pesticide label also includes other important information, including directions for use.</p>

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Naled	DIBROM, Dimethyl 1,2-dibromo-2,2-dichloroethyl phosphate	300-76-5	87.4
Solvent naphtha (petroleum), heavy arom.		64742-94-5	< 15

#### Impurities

Chemical name	Common name and synonyms	CAS number	%
Dichlorvos (DDVP)	DDVP, Nuvan, Vapona, Dimethyl 2,2-dichlorovinyl phosphate	62-73-7	< 0.4

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**Composition comments** All concentrations are in percent by weight.

### 4. First-aid measures

#### Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen or artificial respiration if needed. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention immediately. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

**Ingestion** Call a physician or poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Aspiration may cause pulmonary edema and pneumonitis.

This is a cholinesterase inhibiting organophosphorous pesticide. Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases unconsciousness, convulsions, severe respiratory depression and death may occur. Repeated exposures to small doses of organophosphates may lower the cholinesterase to levels where the above symptoms of acute overexposure are observed.

**Indication of immediate medical attention and special treatment needed**

This product is an Organophosphate (OP) Insecticide. Do not handle the patient without the following protective equipment in place: chemical resistant gloves and apron (preferably nitrile). Remove contaminated clothing and do not reuse without thorough cleaning with detergent and hot water. Dispose of heavily contaminated clothing, including shoes, as a hazardous waste. Do not wait for laboratory confirmation to treat patients with strong clinical evidence of poisoning. In the USA and other countries, contact your local or national poison control center for more information.

Establish airway and oxygenation. IV Atropine sulfate is the antidote of choice against parasympathetic nervous stimulation. If there are signs of parasympathetic stimulation, Atropine Sulfate should be injected at 10 minute intervals in doses of 1 to 2 milligrams until complete atropinization has occurred. Pralidoxime chloride (2-PAM chloride) may also be used as an effective antidote in addition to and while maintaining full atropinization. In adults, an initial dose of 1 gram of 2-PAM should be injected, preferably as an infusion, in 250 cc of saline over a 15 to 20 minute period. If this is not practical, 2-PAM may be administered slowly by intravenous injection as a 5% solution in water over not less than 2 minutes. After about an hour, a second dose of 1 gram of 2-PAM will be indicated if muscle weakness has not been relieved. For infants and children, the dose of 2-PAM is 0.25 grams. Avoid morphine, aminophylline, phenothiazine, reserpine, furosemide and ethacrynic acid. Clear chest by postural drainage. Oxygen administration may be necessary. Observe patient continuously for 48 hours. Repeated exposure to cholinesterase inhibitors may, without warning, cause prolonged susceptibility to very small doses of any cholinesterase inhibitor. Allow no further exposure until time for cholinesterase regeneration has been attained as determined by a blood test. Bathe and shampoo contaminated skin and hair. If ingested, empty stomach; activated charcoal is useful to further limit absorption. If victim is alert, Syrup of Ipecac (2 tablespoons in adults, 1 tablespoon in small children) is indicated. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

**General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

**5. Fire-fighting measures**

**Suitable extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

During fire, gases hazardous to health may be formed. This product will emit toxic fumes when heated sufficiently to decompose, including hydrogen chloride, hydrogen bromide and carbon monoxide. Vapors of the unburned product will also be hazardous. Do not breathe gas, fumes, or vapor.

**Special protective equipment and precautions for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**

In case of fire: Evacuate area. Keep upwind. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage.

**Specific methods**

Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**

This product will emit toxic fumes when heated sufficiently to decompose, including hydrogen chloride, hydrogen bromide and carbon monoxide. Vapors of the unburned product will also be hazardous.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Do not get in eyes. Avoid contact with skin. Avoid contact with clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**Methods and materials for containment and cleaning up**

Large Spills: Stop the flow of material, if this is without risk, to prevent entry into waterways, sewer, basements or confined areas. Dike the spilled material, where this is possible to prevent contamination of local water sources. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Clean the area as described for a small spill.

Small Spills: Cover residue with absorbent (clay, sawdust, straw, kitty litter, etc.), to absorb the remaining liquid. Sweep or shovel into an open drum. Clean surface thoroughly with caustic/bleach, followed by water to remove residual contamination. Absorb and sweep into the same open drum. Rinse with water, absorb, and add to the waste drum. Close the drum and dispose of properly, according to hazardous waste disposal procedures for your locality.

Never return spills to original containers for re-use.

**Environmental precautions**

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage****Precautions for safe handling**

Keep out of the reach of children. Keep away from food, drink and animal feedstuffs. Do not taste or swallow. Do not get this material in contact with eyes. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices. Handle and open container with care. Avoid release to the environment.

**Conditions for safe storage, including any incompatibilities**

Store above 80°F (26.7°C) to prevent solids formation. Keep out of the reach of children. Store locked up. Store in original tightly closed container. Keep away from food, drink and animal feedstuffs. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Naled (CAS 300-76-5)	PEL	3 mg/m <sup>3</sup>
Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)	PEL	400 mg/m <sup>3</sup>
		100 ppm

Impurities	Type	Value
Dichlorvos (DDVP) (CAS 62-73-7)	PEL	1 mg/m <sup>3</sup>

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Naled (CAS 300-76-5)	TWA	0.1 mg/m <sup>3</sup>	Inhalable fraction and vapor.
Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)	TWA	200 mg/m <sup>3</sup>	Non-aerosol.

**US. ACGIH Threshold Limit Values**

Impurities	Type	Value	Form
Dichlorvos (DDVP) (CAS 62-73-7)	TWA	0.1 mg/m3	Inhalable fraction and vapor.

**US. NIOSH: Pocket Guide to Chemical Hazards Components**

Type	Value
Naled (CAS 300-76-5)	3 mg/m3

**Impurities**

Type	Value
Dichlorvos (DDVP) (CAS 62-73-7)	1 mg/m3

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines****US ACGIH Threshold Limit Values: Skin designation**

Dichlorvos (DDVP) (CAS 62-73-7)	Can be absorbed through the skin.
Naled (CAS 300-76-5)	Can be absorbed through the skin.
Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)	Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

Dichlorvos (DDVP) (CAS 62-73-7)	Can be absorbed through the skin.
Naled (CAS 300-76-5)	Can be absorbed through the skin.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Dichlorvos (DDVP) (CAS 62-73-7)	Can be absorbed through the skin.
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**Appropriate engineering controls** Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Safety glasses with side shields or tight fitting chemical goggles should be used whenever hazardous chemicals are being handled. A full face respirator should be worn whenever there is a chance of splashing or misting.

**Skin protection**

**Hand protection** Wear chemical resistant gloves (preferably nitrile)

**Other** The following clothing is required: overalls or pants and long-sleeved shirt, chemical resistant gloves (preferably nitrile), chemical resistant boots. For added protection a chemical resistant apron and a full face shield are recommended. If there is a risk of splashing, misting or release the following additional PPE is required: two piece hooded chemical resistant suit with either a full face respirator or a SCBA. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions are available, use detergent and hot water. Keep and wash PPE separately.

**Respiratory protection** For exposures that may exceed the TLV, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) is required. A full-face respirator or a SCBA may be required if misting or splashing are possible.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** When using, do not eat, drink or smoke. Do not get in eyes. Avoid contact with skin. Avoid contact with clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Off-white to straw yellow

**Odor** Sharp, pungent

**Odor threshold** Not available.

**pH** Not determined

**Melting point/freezing point** 59 °F (15 °C) Maintain temperature above 70 F to prevent formation of solids

**Initial boiling point and boiling range** 320 °F (160 °C)

<b>Flash point</b>	145 °F (63 °C) Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	0.7 % estimated
<b>Flammability limit - upper (%)</b>	5 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	1.00E+01 mm Hg @ 100 F
<b>Vapor density</b>	Heavier than air
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	0.2 %
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Bulk density</b>	14.97 - 15.28 lb/gal
<b>Flammability class</b>	Combustible IIIA estimated
<b>Specific gravity</b>	1.794 - 1.831 @ 20 C/4 C

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions. Unstable in the presence of iron. Corrosive to aluminum and magnesium
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials. Excessive heat.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids. Strong bases. May be corrosive to metals.
<b>Hazardous decomposition products</b>	Heating product to decomposition will cause emission of acrid smoke and fumes of hydrogen chloride, hydrogen bromide, phosphorous oxides, and carbon oxides.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Harmful if inhaled.
<b>Skin contact</b>	Causes severe skin burns and eye damage. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Toxic if swallowed. May cause digestive tract burns. May be harmful if swallowed and enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Permanent eye damage including blindness could result. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

This is a cholinesterase inhibiting organophosphorous pesticide. Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases, unconsciousness, convulsions, severe respiratory depression and death may occur. Product may cause slight but temporary irritation to the eyes and may cause irritation of the skin. Repeated exposures to small doses of organophosphates may lower the cholinesterase to levels where the above symptoms of acute overexposure are observed.

May cause an allergic skin reaction.

### Information on toxicological effects

**Acute toxicity** Toxic if swallowed. Harmful if inhaled. Causes serious eye damage. Causes severe skin burns and eye damage. May be fatal if swallowed and enters airways. May cause an allergic skin reaction.

Product	Species	Test Results
Dibrom Concentrate		
<b>Acute</b>		
<b>Dermal</b>		
<i>Liquid</i>		
LD50	Rabbit	4037 mg/kg Naled Technical
<b>Inhalation</b>		
<i>Mist</i>		
LC50	Rat	> 2.07 mg/l/4h Dibrom 8, female 1.51 mg/l/4h Dibrom 8, male
<b>Oral</b>		
<i>Liquid</i>		
LD50	Rat	50 - 500 mg/kg Naled Technical

No toxicological information is available for this formulation. The toxicological information listed is for the active ingredient (Naled Technical) or for a similar formulation (Dibrom 8).

**Skin corrosion/irritation** Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation** Causes serious eye damage.

**Respiratory or skin sensitization**

**ACGIH sensitization**

DICHLORVOS (DDVP), INHALABLE FRACTION AND VAPOR (CAS 62-73-7) Dermal sensitization

NALED, INHALABLE FRACTION AND VAPOR (CAS 300-76-5) Dermal sensitization

**Respiratory sensitization** Not available.

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No clear evidence of in vivo mutagenicity in mammalian assay.

**Carcinogenicity** No evidence of carcinogenicity in laboratory animals with Naled Technical. However, EPA under its 1999 proposed Guidelines for Carcinogen Risk Assessment has classified DDVP, an impurity in Naled, as having "suggestive evidence of carcinogenicity, but not sufficient to assess human carcinogenic potential." IARC listed DDVP (Dichlorvos) as being possibly carcinogenic to humans (Group 2B).

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Dichlorvos (DDVP) (CAS 62-73-7) 2B Possibly carcinogenic to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

NALED TERATOGENICITY: Maternal toxicity in rats was observed at 40 mg/kg/day (body weight loss, tremors, painful or difficult breathing, and decreased activity) using Naled Technical (a.i.). No developmental effects were observed at this dose level. The maternal NOEL was 10 mg/kg/day. The developmental NOEL was 40 mg/kg/day.

In a two-generation rat reproduction study with Naled Technical (a.i.), a decrease in male body weight gain was observed at 18 mg/kg/day; however, no effects on reproduction were found in adult animals. Decreases in offspring survival, number of pups born and decreased pup weights were noted at 18 mg/kg/day. The NOEL for both adults and offspring was 6 mg/kg/day.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not available.

**Chronic effects** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects. This product is toxic to fish, birds, and other wildlife. Keep out of any body of water. Do not contaminate water when disposing of equipment washwaters or wastes. Notify authorities if any exposure to the general public or environment occurs or is likely to occur.

Components		Species	Test Results
Naled (CAS 300-76-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia pulex)	0.0002 - 0.0008 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.083 - 0.208 mg/l, 96 hours
<b>Impurities</b>			
Dichlorvos (DDVP) (CAS 62-73-7)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia pulex)	0 - 0.0001 mg/l, 48 hours
Fish	LC50	Cutthroat trout (Oncorhynchus clarki)	0.141 - 0.321 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** Not available.

**Mobility in soil** No data available.

**Other adverse effects** None known.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site according to all applicable regulations. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with all applicable local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal methods/information).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal according to all applicable regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

<b>UN number</b>	UN2922
<b>UN proper shipping name</b>	Corrosive liquids, toxic, n.o.s. (Naled RQ = 10.0), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	8
<b>Subsidiary risk</b>	6.1(PGIII)
<b>Label(s)</b>	8, 6.1
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB3, T7, TP1, TP28
<b>Packaging exceptions</b>	154
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241

### IATA

<b>UN number</b>	UN2922
<b>UN proper shipping name</b>	Corrosive liquids, toxic, n.o.s. (Naled)

**Transport hazard class(es)**

**Class** 8  
**Subsidiary risk** 6.1(PGIII)  
**Label(s)** 8, 6.1

**Packing group** III

**Environmental hazards** No.

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Allowed with restrictions.

**Cargo aircraft only** Allowed with restrictions.

Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

**UN number** UN2922

**UN proper shipping name** Corrosive liquids, toxic, n.o.s. (Naled), MARINE POLLUTANT

**Transport hazard class(es)**

**Class** 8  
**Subsidiary risk** 6.1(PGIII)  
**Label(s)** 8, 6.1

**Packing group** III

**Environmental hazards**

**Marine pollutant** Yes

**EmS** Not available.

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**the IBC Code**

**DOT**



**IATA; IMDG**



**Marine pollutant**



**15. Regulatory information****US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This product is registered under EPA/FIFRA Regulations as a RESTRICTED USE PESTICIDE. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

**HAZARD TO HUMANS AND DOMESTIC ANIMALS.**

**DANGER: CORROSIVE!** Causes irreversible eye damage. Causes skin burns. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not breathe mist/vapors/spray.

**ENVIRONMENTAL HAZARDS**

This product is toxic to fish, birds, and other wildlife. Keep out of any body of water. Do not contaminate water when disposing of equipment washwaters or wastes. Before making the first application in a season, consult with the primary State agency responsible for regulating the pesticide to determine if permits are required or regulatory mandates exist. Runoff from treated areas or deposition of spray droplets into a body of water may be hazardous to fish and aquatic invertebrates. Do not apply over bodies of water (e.g., lakes, swamps, rivers, permanent streams, natural ponds, commercial fish ponds, marshes or estuaries), except when necessary to target areas where adult mosquitoes are present, and weather conditions will facilitate movement of applied material away from the water in order to minimize incidental deposition into the water body. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. See the label for more complete information.

**PHYSICAL AND CHEMICAL HAZARDS**

Combustible. Do not use or store near heat or open flame.

For additional information see the label.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Dichlorvos (DDVP) (CAS 62-73-7) Listed.

Naled (CAS 300-76-5) Listed.

**SARA 304 Emergency release notification**

Dichlorvos (DDVP) (CAS 62-73-7) 10 LBS

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Dichlorvos (DDVP)	62-73-7	10	1000		

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories**

Flammable (gases, aerosols, liquids, or solids)  
 Acute toxicity (any route of exposure)  
 Skin corrosion or irritation  
 Serious eye damage or eye irritation  
 Respiratory or skin sensitization  
 Germ cell mutagenicity  
 Carcinogenicity  
 Specific target organ toxicity (single or repeated exposure)  
 Aspiration hazard

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Naled	300-76-5	87.4
Dichlorvos (DDVP)	62-73-7	< 0.4

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Dichlorvos (DDVP) (CAS 62-73-7)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations****California Proposition 65**

**WARNING:** WARNING: This product contains a chemical known to the State of California to cause cancer. This product can expose you to Dichlorvos (DDVP), which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Dichlorvos (DDVP) (CAS 62-73-7)

Listed: January 1, 1989

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** Sep-28-2017

**Revision date** Sep-10-2018

**References**  
 ACGIH®: American Conference of Governmental Industrial Hygienists  
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act  
 EPA: Environmental Protection Agency  
 FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act  
 IARC: International Agency for Research on Cancer  
 NTP: National Toxicology Program  
 OSHA: Occupational Safety and Health Agency  
 SARA: Superfund Amendments and Reauthorization Act  
 TSCA: Toxic Substances Control Act  
 DOT: Department of Transportation  
 IMDG: International Maritime Dangerous Goods  
 IATA: International Air Transport Association

**Version #** 2.1

**HMIS® ratings**  
 Health: 3  
 Flammability: 2  
 Physical hazard: 0

**NFPA ratings**  
 Health: 3  
 Flammability: 2  
 Instability: 0

**Disclaimer**

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**Revision information**

Hazard(s) identification: Hazard statement

Composition / Information on Ingredients: Disclosure Overrides

Toxicological Information: Toxicological Data

Toxicological information: Phrases

GHS: Classification