

## SAFETY DATA SHEET

SDS REVISIONS: FORMAT DATE OF ISSUE: 10/30/18

**DIBROM®** 

SUPERSEDES: 09/12/15

# FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL DAY OR NIGHT 1-800-561-8273 or CHEMTREC – DAY OR NIGHT 1 800-424-9300

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 PRODUCT IDENTIFIER:

TRADE NAME: DIBROM®

1.2 RECOMMENDED USE: GROUP 1B INSECTICIDE

1.3 DISTRIBUTED BY:

LOVELAND PRODUCTS CANADA, INC.

789 DONNYBROOK DRIVE • DORCHESTER, ONTARIO NOL 1G5

1.4 24 Hour Emergency Phone: (Chemtrec): 1-800-424-9300 (Toll Free) - Additional Emergency Phone 1-800-561-8273

Loveland Technical Service: 1-800-328-4678

U.S. Coast Guard National Response Center: 1-800-424-8802

#### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Acute toxicity – Oral	Category 3	H301
Acute toxicity – Inhalation (Dusts/Mists)	Category 4	H332
Skin corrosion/irritation	Category 1	H314
Eye damage/irritation	Category 1	H318
Carcinogenicity	Category 1B	H350
Aspiration hazard	Category 1	H304

## 2.2 Label elements



Signal word: DANGER

Hazard Statement: H227 - Combustible liquid.

H301 – Toxic if swallowed. H332 – Harmful in inhaled.

H314 – Causes severe skin burns and eye damage.

H318 – Causes serious eye damage. H350 – May cause cancer by inhalation.

H304 – May be fatal if swallowed and enters airways.

H400 - Very toxic to aquatic life.

H410 – Very toxic to aquatic life with long lasting effects.

Precautionary

Precautionary

Statement: P260 – Do not breathe dust/fume/gas/mist/vapours/spray.

(Prevention): P262 – Do not get in eyes, on skin, or on clothing.

P264 – Wash face, hands and any exposed skin thoroughly after handling.

P270 – Do not eat, drink or smoke when using this product. P271 – Use only outdoors or in a well-ventilated area.

P273 – Avoid release to the environment.

P280 – Wear protective gloves/protective clothing/eye protection/face protection. P272 – Contaminated work clothing should not be allowed out of the workplace.

Statement: P301+P310: IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER or doctor/physician.

(Response): P330: Rinse mouth.

P302+P352: IF ON SKIN: Wash with soap and water.



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P362 – Take off contaminated clothing and wash it before reuse. P310 – Immediately call a Poison Centre or doctor/physician.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and

easy to do. Continue rinsing.

P320 – Specific treatment is urgent (see the product label).

P391 - Collect spillage.

Precautionary Statement:

(Storage): P403+P233 – Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

Precautionary Statement:

(Disposal) P501 – Dispose of contents/container to an approved waste disposal to an approved waste disposal facility.

#### 2.3 Other hazards

None known

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

#### 3.1 Substances

#### 3.2 Mixtures

Chemical Name:	CAS No.	Weight %
Naled	300-76-5	62.00   900 g/L
Solvent naphtha (petroleum) heavy aromatic	64742-94-5	26.40
DDVP	62-73-7	< 0.3
1,2-4 Trimethylbenzene	95-63-6	< 0.1
Naphthalene	91-20-3	< 0.3

<sup>\*</sup>Ingredients not specifically listed are non-hazardous or are to be considered proprietary or confidential business information.

## 4. FIRST AID MEASURES

If swallowed:

#### 4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or

doctor for treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5

minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by the poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious

person.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably

mouth-to-mouth if possible. Call a poison control centre or doctor for further treatment advice.

#### 4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Headache, nausea, dizziness, sweating, salivation, runny nose and eyes.

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## 4.3 Immediate Medical Attention and Special Treatment

Treatment: This product is a cholinesterase inhibitor. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of

exposure (baseline data are useful).

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-561-8273

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

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NOTES TO PHYSICIAN:

This product is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate degree of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as pralidoxime chloride, may be therapeutic if used early; however, use only in conjunction with atropine. In cases of severe acute poisoning, use antidotes immediately after establishing an open airway and respiration. With oral exposure, the decision of whether to induce vomiting or not should be made by an attending physician. NOTE: Product contains a petroleum distillate solvent. Vomiting may cause aspiration pneumonia.

## 5. FIRE FIGHTING MEASURES

#### 5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use medium appropriate to surrounding fire. Foam, carbon dioxide (CO2), dry chemical, soft stream or

water fog only if necessary.

#### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURÉ:

Specific Hazards During Firefighting: During fire, gases hazardous to health may be formed. This product will emit toxic fumes when

heated to decomposition, including hydrogen chloride, hydrogen bromide and carbon monoxide. Vapours of the unburned product will also be hazardous. Do not breather gas, fumes, or vapour.

## 5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving

chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and

deny unnecessary entry.

## 6. ACCIDENTAL RELEASE MEASURES

## 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions:

Avoid inhalation of vapours and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

## **6.2 ENVIRONMENTAL PRECAUTIONS**

Environmental Precautions:

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean highwater mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

## 6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up:

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to

Remove residual contamination.

Never return spills to original containers for re-use.

# 7. HANDLING AND STORAGE

## 7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling:

Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# 7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers:

Store in a cool place, DO NOT store in direct sunlight. Protect from freezing temperatures. Do not contaminate water, food or feed by storage or disposal.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## 8.1 CONTROL PARAMETERS:

#### OCCUPATIONAL EXPOSURE LIMITS

Workplace Exposure Level (ACGIH) TLVs

Components Type Value

Naled TWA 0.1 mg/m³ (Inhalable fraction and vapour) Solvent naphtha (petroleum)

heavy aromatic TWA 200 mg/m³ (Non-aerosol)

U.S. Workplace Exposure Level (OSHA) PELs

 Components
 Type
 Value

 Naled
 TWA
 3 mg/m³

Solvent naphtha (petroleum)

heavy aromatic TWA 400 mg/m<sup>3</sup>

**Biological limit values** 

**ACGIH Biological Exposure Indices** 

Components Value Specimen

No listings

#### 8.2 EXPOSURE CONTROLS:

#### **Engineering Measures**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application

**Individual Protection Measures:** 

Eye / Face Protection: Goggles or shielded safety glasses are recommended.

Skin Protection: Long-sleeved shirt and long pants. Chemical-resistant gloves. Chemical-resistant boots.

Respiratory Protection: If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA

Respiratory Protection standard.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**9.1** APPEARANCE: Liquid

ODOUR: Pungent, sharp.
ODOUR THRESHOLD: No data available.
COLOUR: Off-white to straw-yellow.
pH: 3 (5% deionized water)
MELTING POINT / FREEZING POINT: 15 °C (59 °F)
BOILING POINT: 160 °C (320 °F)

FLASH POINT: 63 °C (145 °F) Closed cup – Combustible liquid Class IIIA (estimated).

FLAMMABILITY (solid, gas): No data available.

UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: 0.7% estimated (lower) | 5.0% estimated (upper).

VAPOUR PRESSURE: 1.00E+01 mm Hg @ 37.8 °C (100 °F).

SOLUBILITY: No data available.

PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.

AUTO-IGNITION TEMPERATURE: No data available. DECOMPOSITION TEMPERATURE: No data available.

VISCOSITY: No data available.

SPECIFIC GRAVITY (Water = 1): 1.42 - 1.45 g/ml @ 25 °C (77 °F)

DENSITY: 1.42 – 1.45 kg/L

Note: These physical data are typical values based on material tested but may vary from sample to sample.

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

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## 10. STABILITY AND REACTIVITY

#### 10.1 REACTIVITY

Stable

#### 10.2 CHEMICAL STABILITY

Stable under normal temperature conditions. Unstable in the presence of iron. Corrosive to aluminum and magnesium.

## 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No data available. Will not polymerize.

#### **10.4 CONDITIONS TO AVOID**

Heat, flames and sparks.

#### 10.5 INCOMPATIBILE MATERIALS

Strong oxidizing agents. Strong acids. Strong bases. May be corrosive to metals.

## 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon, hydrogen chloride, hydrogen bromide, and oxides of phosphorous.

## 11 TOXICOLOGICAL INFORMATION

## 11.3 LIKELY ROUTES OF EXPOSURE

Eye contact. Skin absorption. Skin contact.  $LC_{50}$  (male rat): 1.51 mg/L (4 HR) – nose only

LD<sub>50</sub> Oral (rat): 235 mg/kg

LD<sub>50</sub> Dermal (female rat): 5,050 mg/kg Acute Toxicity Estimates: No data available

Skin Irritation: Causes severe skin burns and eye damage.

Eye Irritation: Causes serious eye damage.

Specific Target Organ Toxicity: No data available.

Aspiration: No data available

Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenicity: ACGIH TLV-A4 (Not Classifiable as a Human Carcinogen); IARC-2B (Possibly Carcinogenic to Humans).

Germ Cell Mutagenicity: No data available

Interactive Effects: None known

## 12 ECOLOGICAL INFORMATION

#### 12.3 ECOTOXICITY

The product is toxic to fish and aquatic invertebrates. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. Information below is based on the active ingredient Naled. **Ecotoxicological Data** 

 Species
 Test Results

 Naled
 Fish
 0.083 − 0.208 mg/L − 96-hour LC₅₀

 Daphnia magna
 0.0002 − 0.0008 mg/L − 48-hour EC₅₀

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favour drift from target area.

## 12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available.

## 12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

## 12.4 MOBILITY IN SOIL

No data available.

## 12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

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#### 13 **DISPOSAL CONSIDERATIONS**

## 13.1 WASTE TREATMENT METHODS

For recyclable containers: DO NOT reuse the container for any other purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site: Triple-or pressure-rinse the empty container. Dispose of rinsate in accordance with provincial requirements. Make the rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

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For refillable containers: For disposal, the container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse the product container for any other purpose.

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#### 14.3 LAND TRANSPORT

TDG Shipping Description: UN2922, CORROSIVE LIQUIDS, TOXIC (NALED), 8, (6.1), III, ERG GUIDE 152

DOT Shipping Description: UN2922, RQ CORROSIVE LIQUIDS, TOXIC (NALED), 8, (6.1), III, MARINE POLLUTANT, ERG GUIDE 152

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OR VERMIN EXTERMINATORS, ANIMAL OR POULTRY,

NOI; POISON (NMFC 102100; CLASS: 77.5)

#### 15 **REGULATORY INFORMATION**

#### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings: NFPA **HMIS** Health Least Health Flammability Flammability 2 Slight 2 0 Reactivity Instability 2 Moderate 3 High Н PPE Severe SARA Hazard Notification/Reporting SARA Title III Hazard Category: **Immediate** Fire Sudden Release of Pressure \_N\_\_ Delayed Reactive

Reportable Quantity (RQ) under U.S. CERCLA: Naled (CAS: 300-76-5): 10 pounds; DDVP (Dichlorvos) (CAS: 62-73-7): 10 pounds; Naphthalene (CAS: 91-20-3): 100 pounds (calculated in product: 15 pounds).

SARA, Title III, Section 313: Naled (CAS: 300-76-5); DDVP (Dichlorvos) (CAS: 62-73-7); Naphthalene (CAS: 91-20-3)

RCRA Waste Code: Not listed. CA Proposition 65: Not applicable.

WHMIS [Canada]: Pest control products are not controlled under WHMIS. Classified D2B

#### 16 OTHER INFORMATION

SDS STATUS: Format revised.

PREPARED BY: Product Stewardship and Regulatory Affairs REVIEWED BY: Safety, Health and Environment

PEST CONTROL PRODUCTS ACT REG. NO.: 7442

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