

# COOPERS ENVIRONMENTAL SCIENCE (PTY) LTD

## Material Safety Data Sheet

### 1. IDENTIFICATION OF THE SUBSTANCE / MISTURE AND OF THE COMPANY

#### 1.1 Product Name:

D.B.M. Double Strength

#### 1.2 Use: Insecticide

#### 1.3 Company Name:

Coopers Environmental Science (Pty) Ltd  
Reg. No. 2000/023667/07  
P.O. Box 14374  
BREDELL 1623  
SOUTH AFRICA  
TEL: (011) 979-4246/7

#### 1.4 Emergency Contact Numbers:

Tygerberg Poison Centre: +2721 931 6129  
Griffon Poison Information Centre - 082 446 8946

### 2. HAZARD IDENTIFICATION

#### 2.1 Classification of the Substance or Mixture:

Acute Toxicity: Oral, Category 4  
Acute Toxicity: Skin, Category 4  
Skin Corrosion/Irritation, Category 2  
Serious Eye Damage/Eye Irritation, Category 2  
Aquatic Toxicity (Acute), Category 1

#### 2.2 Label Elements:



#### GHS Signal Word: Warning

#### GHS Hazard Phrases:

H302: Harmful if swallowed.  
H312: Harmful in contact with skin.  
H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H400: Very toxic to aquatic life.

#### GHS Precaution Phrases:

P264: Wash {hands} thoroughly after handling.  
P273: Avoid release to the environment.  
P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

**GHS Response Phrases:**

P301+312: IF SWALLOWED: P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321: Specific treatment {see ... on this label}.

P330: Rinse mouth.

P332+313: If skin irritation occurs, get medical advice/attention.

P337+313: If eye irritation persists, get medical advice/attention.

P362+364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

**GHS Storage and Disposal Phrases:**

Please refer to Section 7 for Storage and Section 13 for Disposal information.

**2.3 Adverse Human Health:** Causes serious eye irritation.

**Effects and Symptoms:**

Causes skin irritation.

Harmful if swallowed or in contact with skin.

Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation.

May cause respiratory system irritation.

Very toxic to aquatic life.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

**3. COMPOSITION INFORMATION ON INGREDIENTS:**

CAS NO	HAZARDOUS COMPONENT	CONCENTRATION	GHS CLASSIFICATION
300-76-5	Naled (Bromchlorphos)	96 %	Acute Tox.(O) 4: H302 Acute Tox.(D) 4: H312 Skin Corr. 2: H315 Eye Damage 2: H319 Aquatic (A) 1: H400

**4. FIRST AID MEASURES:**

**4.1 Skin Contact:**

Immediately remove contaminated clothing, wear rubber gloves and protect clothing, rinse the affected skin area with plenty of soap and cool water or shower. Speed and thoroughness is essential. DO NOT rub skin hard.

**4.2 Eye Contact:**

Immediately wash eyes with copious amounts of clean water for at least 15 min, cover with a sterile pad and contact a doctor.

#### **4.3 Ingestion and overexposure:**

Keep patient calm and reassured, put in recovery position, rinse mouth with water. Never give anything by mouth to an unconscious person.

**DO NOT** apply direct mouth to mouth respiration, use a disposable protective mouthpiece. Persons attending the victim must avoid contact with the vomit or any contamination, wear gloves and protective clothing.

#### **4.4 Inhalation:**

Remove patient from source of poisoning to well-ventilated area and keep him calm and reassured. If necessary, administer artificial respiration and oxygen or closed chest cardiac massage.

#### **4.5 NOTE TO PHYSICIAN:**

Administer Atropine sulphate, intravenously (1 to 4 mg) every 5 to 10 minutes until signs of atropinisation, (dry flushed skin and tachycardia); 2-PAM 50 mg/kg up to total dose of 1 to 2 g or two thirds of this dose of Protopam. Repeat oximes if necessary.

#### **Do not give morphine**

SEEK MEDICAL ADVICE PROMPTLY AND SHOW THIS SDS TO A MEDICAL PRACTITIONER

### **5. FIRE FIGHTING MEASURES:**

#### **5.1 Fire Hazard:**

Flammable liquid

Personnel involved in a fire situation with this material should wear a self-contained breathing apparatus as toxic and corrosive fumes may be given off.

No unprotected person should be allowed in the vicinity.

Bromchlorphos decomposes in a fire to emit fumes of Br-, Cl-, and POx.

#### **5.2 Fire extinguishing agents to be used:**

Foam, dry chemical, carbon dioxide, water spray (fog).

#### **5.3 Fire Fighting Instructions:**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

### **6. ACCIDENTAL RELEASE MEASURES:**

#### **6.1 Protective Precautions, Protective Equipment and Emergency Procedures:**

Avoid breathing vapors and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

#### **6.2 Environmental Precautions:**

Take steps to avoid release into the environment, if safe to do so.

Soak up spillage with dry sand, shovel up carefully and dispose of as for toxic waste in accordance with local/national regulations. **DO NOT** burn.

## 7. HANDLING AND STORAGE:

### 7.1 Storage:

Store under lock and key.  
Store in a cool, dry place away from sources of heat and naked flames.  
Store away from foodstuffs, eating utensils, feeds and drinking water.  
Keep out of reach of children and pets.

### 7.2 Handling Precautions:

For use as directions on the label only. Wear protective clothing and respirator when handling the concentrate. Do not eat, drink or smoke whilst mixing or applying. All protective clothing shall be decontaminated, washed, rinsed and dried before re-use. Wash applicator, receptacles etc., thoroughly before re-using with other materials. Prepare only sufficient baits and/or dilutions for immediate use.

### Note:

During application and when cleaning equipment and protective clothing, contamination of all sources of drinking water, rivers.

## 8. EXPOSURE CONTROL AND PERSONAL PROTECTION:

### 8.1 Respiratory protection:

When respiratory protection is required the use of an approved air-purifying respirator equipped with organic vapor cartridges is recommended.

### 8.2 Hand/skin Protection:

**Chemical resistant gloves (preferably nitrile), body covering that has long sleeves and long pants, and chemical resistant boots** are required to prevent skin contamination. A chemical resistant apron is required if there is a risk of spillage or splashing.

### 8.3 Eye/Face Protection:

Safety glasses should be worn whenever working with chemicals. Goggles or face shield are required if there is a chance of splashing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

<b>Physical state:</b>	Liquid
<b>Odor:</b>	Strong pungent odour
<b>Color:</b>	Off white to straw yellow
<b>Solubility:</b>	0.2% in water as well as aromatic hydrocarbons, chlorinated hydrocarbons, ketones and esters
<b>Melting point:</b>	26-27°C
<b>Degradation:</b>	In the environment degradation involves oxidation and hydrolysis.
<b>Flammability:</b>	Flammable

## 10. STABILITY AND REACTIVITY:

<b>Corrosiveness:</b>	Corrosive to iron, aluminium and magnesium.
<b>Stability:</b>	Stable under normal use and storage conditions. It may be photochemical reactive Compatibility : Incompatible with copper containing materials.

## 11. TOXICOLOGICAL INFORMATION:

### Bromchlorphos Technical Toxicity:

Acute oral LD50:	430 mg/kg
Acute dermal LD50:	1100 mg/kg (male)
Acute inhalation LC50(4h) rats:	300 mg/kg (male)
Irritation:	Eye and skin irritation.
Skin sensitization:	Weak skin sensitization.
TLV-TWA for bromchlorphos, technical:	3 mg/m <sup>3</sup> (skin).
Teratogenicity:	Maternal and development NOEL was 10 and 40 mg/kg/day respectively.
Reproductive Toxicity:	The NOEL for both adults and offspring was 6 mg/kg/day.
Mutagenicity:	Non-mutagenic.
Carcinogenicity:	Non-carcinogenic.

### Formulation Toxicity:

Acute oral LD50:	448 mg/kg
Acute dermal LD50:	1145 mg/kg

## 12. ECOLOGICAL INFORMATION:

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 wash waters or wastes. Notify authorities if any exposure to the general public or environment occurs or is likely to occur.

Fish:	LC50 (24 h) for Goldfish 2-4 gm/l
Other aquatic spp.:	LC50 for Carbs 0.33 mg/l
Bees:	Toxic to bees

## 13. DISPOSAL CONSIDERATIONS:

### 13.1 Disposal of Residue:

Residue to be disposed of as for toxic waste in accordance with local/national regulations.

### 13.2 Disposal of Used Packaging Material:

Empty containers to be disposed of as toxic waste in accordance with local/national regulations. Do not re-use for any other purpose.

## 14. TRANSPORT INFORMATION:

UN NR.:	3017
Proper Shipping Name:	Organophosphorus pesticides, liquid, toxic, flammable, flashpoint not less than 23 °C
Packaging Group:	III
Packaging Class:	6.1
Chemical group:	Organophosphate
IMDG:	Yes. Marine pollutant

**Label:**



**Hazardous Identification Number:**

663

3017

**15. REGULATORY INFORMATION:**

Regulations of the European union (Labelling) / National legislation/Regulations

The product is registered as L 4576 under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, Act 36, 1947.

**Hazard Symbol:** Xn – Harmful

**Risk Phrases:** Flammable. (R10)  
Harmful if swallowed. (R22)  
Irritation to skin (R39)

**Safety Phrases:** Keep out of reach of children (S2)  
Keep away from food, drink and animal feeding stuffs (S13)  
When using, do not eat, drink or smoke. (S20/21)  
Avoid contact with skin (S24)  
If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. (S62)

**16. OTHER INFORMATION:**

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.