

# COOPERS ENVIRONMENTAL SCIENCE (PTY) LTD

## Material Safety Data Sheet

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

#### 1.1 Product Name:

Mostop

#### 1.2 Use: Public Health

#### 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

#### Classification of the substance or mixture

#### According to UN GHS criteria

STOT RE 2

Aquatic Acute 1

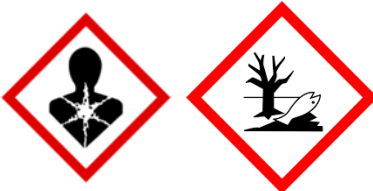
Aquatic Chronic 1

For the classifications not written out in full in this section the full text can be found in section 16.

#### Label elements

#### Globally Harmonized System (GHS)

#### Pictogram:



**Signal Word:** Warning

#### Hazard Statement:

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary Statement:**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

Precautionary Statements (Prevention):

P260 Do not breathe dust.

Precautionary Statements (Response):

P314 Get medical advice/attention if you feel unwell.

P391 Collect spillage.

**Precautionary Statements (Disposal):**

P501 Dispose of contents/container to hazardous or special waste collection point.

**According to UN GHS criteria**

**Hazard determining component(s) for labelling: TEMEPHOS**

**Other hazards**

**According to UN GHS criteria**

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

**3. COMPOSITION INFORMATION ON INGREDIENTS:**

**Substances:** Not applicable

**Mixtures:**

**Chemical nature:** Emulsifiable Concentrate

| CAS NO    | HAZARDOUS COMPONENT | CONCENTRATION | GHS CLASSIFICATION  |
|-----------|---------------------|---------------|---|
| 3383-96-8 | Temephos            | 50 %          | Acute Tox. 5 (oral)<br>Acute Tox. 5 (dermal)<br>STOT RE 1<br>Aquatic Acute 1<br>Aquatic Chronic 1<br>H313, H332, H303, H372, H400, H410   |
| 75-56-9   | Propylene oxide     | 1.5 %         | GHS02 – Flammable<br>Flam. Liq. 1 H224 : Extremely flammable liquid and vapor<br>GHS08 – Health<br>Muta. 1B H340: May cause genetic effects<br>Carc. 1B H350: May cause cancer<br>GHS07 - Irritant<br>Acute Tox. 4 H302: Harmful if swallowed<br>Acute Tox. 4: H312: Harmful in contact with skin |

|           |                              |      |  |
|-----------|------------------------------|------|--|
|           |                              |      | <p>Acute Tox. 4: H332: Harmful if inhaled<br/>         Skin Irrit. 2: H315: Causes skin irritation<br/>         Eye Irrit. 2: H319: Causes serious eye irritation<br/>         STOT SE 3: H335: May cause respiratory irritation</p>                                     |
| 6422-83-9 | Aromatic hydrocarbon solvent | 32 % | <p>H315 (92.86%): Causes skin irritation [Warning Skin corrosion/irritation]</p> <p>H317 (32.14%): May cause an allergic skin reaction [Warning Sensitization, Skin]</p> <p>H319 (92.86%): Causes serious eye irritation [Warning Serious eye damage/eye irritation]</p> |

#### 4. FIRST AID MEASURES:

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

**SEEK MEDICAL ADVICE PROMPTLY AND SHOW THIS MSDS TO A MEDICAL PRACTITIONER**

#### 5. FIRE FIGHTING MEASURES:

##### 5.1 Extinguishing media

**Suitable extinguishing media:**

Water spray, foam, dry powder

**Unsuitable extinguishing media for safety reasons:**

Carbon dioxide

**Special hazards arising from the substance or mixture:**

Carbon monoxide, Carbon dioxide, sulfur oxides, phosphorus oxides

**The substances/groups of substances mentioned can be released in case of fire.**

## **5.2 Advice for fire-fighters**

### **Special protective equipment:**

Wear self-contained breathing apparatus and chemical-protective clothing.

### **5.3 Further information:**

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

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

### **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

### **6.2 Environmental precautions**

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### **6.3 Methods and material for containment and cleaning up**

**For small amounts:** Contain with dust binding material and dispose of.

**For large amounts:** Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

### **6.4 Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

## **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.

## 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 vapour 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:

**Description:** Liquid (Emulsifiable Concentrate)  
**Colour:** Clear brown  
**Odour:** Strong chemical odour  
**Density:** 0.995 kg/l  
**Solubility:** Emulsifies in water  
**Flash point:** 49 °C

## 10. STABILITY AND REACTIVITY:

### Reactivity:

No hazardous reactions if stored and handled as prescribed /indicated.

### Chemical stability:

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions:

No hazardous reactions if stored and handled as prescribed/indicated.

### Conditions to avoid:

See MSDS section 7 - Handling and storage.

### Incompatible materials

### Substances to avoid:

Strong acids, strong bases, strong oxidizing agents

### Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

## 11. TOXICOLOGICAL INFORMATION:

### 11.1 Toxicity:

The product is unlikely to cause an acute hazard in normal use. Temephos, technical is an organophosphate cholinesterase inhibitor absorbed on ingestion, inhalation and skin contact.

### 11.2 Toxicity information Temephos technical:

**Acute oral LD50 for rats:** 4204 mg/kg  
**Acute dermal LD50 rats:** 4000 mg/kg  
**Acute inhalation LC50:** 4.79 mg/l air  
**TLV – TWA for temephos:** 10 mg/m<sup>3</sup>

**Toxicity information Propylene oxide:**

|                           |            |
|---------------------------|------------|
| Acute oral LD50 for rats: | 380 mg/kg  |
| Acute dermal LD50 rats:   | 1245 mg/kg |
| Acute inhalation LC50:    | 4000 mg/kg |

**Toxicity information Aromatic hydrocarbon:**

|                        |            |
|------------------------|------------|
| Acute oral LD50:       | 2400 mg/kg |
| Acute inhalation LC50: | 90 mg/kg   |

**11.3 Toxicity on Formulated product:**

|                        |                  |
|------------------------|------------------|
| Acute Oral LD50:       | 342 769 mg/kg    |
| Acute Dermal LD50:     | 497 393 mg/kg    |
| Acute Inhalation LC50: | 926,411 mg/l air |

**12. ECOLOGICAL INFORMATION:**

**12.1 Assessment of aquatic toxicity:**

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from substances /products of a similar structure or composition.

**12.2 Toxicity to fish:**

LC50 (96 h) 5,4 mg/l, Cyprinodon variegatus (Flow through.)

**12.3 Aquatic invertebrates:**

EC50 (96 h) 0,014 mg/l, other (Flow through.)

**12.4 Aquatic plants:** Not determined

**12.5 Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: temephos (ISO

**Assessment biodegradation and elimination (H<sub>2</sub>O):**

Not readily biodegradable (by OECD criteria).

**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.

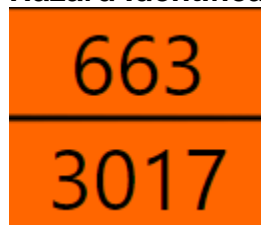
Do not re-use for any other purpose.

## 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  
**Labels:**



**Hazard Identification Number:**



## 15. REGULATORY INFORMATION:

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

### 15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

## 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.