

COOPERS ENVIRONMENTAL SCIENCE (PTY) LTD.

Material Safety Data Sheet

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

1.1 Product Name:

PCO Diazinon

1.2 Use: Pest Control Operators

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

Carcinogenicity, Category 1B

Aquatic Toxicity (Acute), Category 1

Aquatic Toxicity (Chronic), Category 1

2.2 Label Elements:



GHS Signal Word: Danger

GHS Hazard Phrases:

H302: Harmful if swallowed.

H350: May cause cancer.

H400: Very toxic to aquatic life.

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

GHS Precaution Phrases:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

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: Call a POISON CENTER or doctor/physician if you feel unwell.

P308+313: IF exposed or concerned: Get medical attention/advice.

P330: Rinse mouth.

P391: Collect spillage.

3. COMPOSITION INFORMATION ON INGREDIENTS:

CAS NO	HAZARDOUS COMPONENT	CONCENTRATION	GHS CLASSIFICATION
333-41-5	Diazinon	>88 %	Acute Tox.(O) 4: H302 Aquatic (A) 1: H400 Aquatic (C) 1: H410 Carcinogen 1B: H350
106-88-7	Propylene Oxide	>2 %	H224: Extremely flammable liquid and vapor [Danger Flammable liquids] H302: Harmful if swallowed [Warning Acute toxicity, oral] H311: Toxic in contact with skin [Danger Acute toxicity, dermal] H319: Causes serious eye irritation [Warning Serious eye damage/eye irritation]
64742-95-6	Light Aromatic Solvent	>3 %	Acute Tox. 4 (H332) Acute Tox. 5 (H303) Skin Irrit. 3 (H316) Eye Irrit. 2B (H320) Asp. Tox. 2 (H305) Aquatic Acute 1 (H400) Flam. Liq. 3 (H226)

Hazards: Primary: Organophosphorus pesticides, liquid, toxic, flammable, n.o.s.
Contains: Diazinon
Nature of Hazard: The toxin is an organophosphorus cholinesterase inhibitor

4. FIRST AID MEASURES:

4.1 Skin contact: Avoid repeated or prolonged contact. The toxin is an organophosphorus cholinesterase inhibitor, readily absorbed through intact skin. Contact may cause redness, irritation and dermatitis. Immediately remove contaminated clothing, wear rubber gloves to avoid contact with contaminated clothing,

rinse the affected skin area with plenty of soap and cool water or shower.

4.2 Eye contact: Irritating, may cause redness, pain, blurred vision, conjunctivitis. Immediately wash eyes with copious amounts of clean water for at least 15 minutes, cover with a sterile pad.

4.3 Ingestion/overexposure: The toxin is an organophosphorus cholinesterase inhibitor; may cause headache, fatigue, faintness, giddiness, excessive sweating, nausea, abdominal pains, vomiting, diarrhea, tightness of the chest, anxiety, blurred vision, and muscle twitching beginning in the eyelids and tongue, small pupils, respiratory distress. 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 should avoid direct contact with the vomit; wear rubber gloves and protective clothing.

4.4 Inhalation: Avoid inhalation of spray mist. The toxin is an organophosphate cholinesterase inhibitor; may cause shortness of breath, dizziness, profuse sweating, nausea, vomiting, abdominal cramps and/or respiratory distress. Remove patient from source of poisoning to well-ventilated area and keep him quiet 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 MSDS TO A MEDICAL PRACTITIONER

5. FIRE FIGHTING MEASURES:

Flammable liquid. Flash point: 22 °C (Closed Cup).

5.1 Suitable Extinguishing Media: Use carbon dioxide, water, or dry chemical spray.

5.2 Unsuitable Extinguishing Media: A solid water stream may be inefficient.

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 raising and breathing spray mist/ fumes 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 Spillage:

Soak up spillage with dry sand, shovel up and dispose of as for toxic waste in accordance with local/national regulations. DO NOT burn. Protective clothing to be worn when clearing spillage.

7. HANDLING AND STORAGE:

7.1 Storage:

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

7.2 Handling precautions:

For use as directions on the label only. Wash thoroughly after application. Remove and wash contaminated clothing after use. Wash applicator, receptacles, etc., thoroughly before re-using with other materials.

Note:

During application and when cleaning equipment and protective clothing, contamination of all sources of drinking water, rivers, dams, crops or grazing shall be prevented.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION:

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| 8.1 Control Measures: | Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations |
| 8.2 Respiratory Protection: | When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator. |
| 8.3 Emergency conditions: | Use an approved positive-pressure self-contained breathing apparatus. |
| 8.4 Hand/skin Protection: | Use protective clothing impervious to this material. Selection for specific items will depend on operation. |
| 8.5 Eye/Face Protection: | Use safety glasses. Where contact with the liquid is likely, chemical goggles are recommended. |

9. PHYSICAL AND CHEMICAL PROPERTIES:

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|----------------------|---|
| Description : | Liquid (Emulsifiable Concentrate) |
| Colour: | Clear brown |
| Odour: | Chemical odour |
| Solubility: | Soluble. Emulsifies in water. |
| Flash point: | 22 °C (Closed cup) |
| Degradation: | In the environment degradation involves oxidation and hydrolysis. |

10. STABILITY AND REACTIVITY:

- 10.1 Corrosiveness:** Corrosive to iron and some other materials.
- 10.2 Stability:** Susceptible to oxidation above 100°C. Stable in neutral media, but slowly hydrolysed in alkaline media and more rapidly in acidic media.
- 10.3 Compatibility:** Incompatible with alkaline materials (residual toxicity may be decreased).
- 10.4 Flammability:** Diazinon decomposes in a fire to emit fumes of NO_x, PO_x and SO_x.

11. TOXICOLOGICAL INFORMATION:

11.1 Toxicity Diazinon Technical:

- Acute oral LD50:** 1250 mg/kg
Acute dermal LD50: > 2150 mg/kg
Inhalation LC50 (4h): > 2330 mg/m³

11.2 Toxicity Propylene oxide:

- Acute oral LD50:** >380 mg/kg
Acute Dermal LD50: 500 mg/kg
Acute Inhalation LC50: 3.8 mg/l air

11.3 Toxicity Aromatic Solvent:

- Acute Oral LD50:** >2000 mg/kg
Acute Dermal LD50: >2000 mg/kg
Acute Inhalation LC50 (4h): 15 mg/l air

11.4 Toxicity Formulated Product:

- Acute Oral LD50:** 129 595 mg/kg
Acute Dermal LD50: 215 376 mg/kg
Acute Inhalation LC50: 13 087 mg/l air

12. ECOLOGICAL INFORMATION:

Ecotoxicity

- Toxicity to fish:** LC50 (96h) for bluegill sunfish: 16 mg/l
LC50 (96h) Rainbow trout: 2.6 – 3.2 mg/l
LC50 (96h) Carp: 7.6 – 23.4 mg/l

Highly toxic to bees

- Toxicity:** Avoid release into the environment.
Runoff from fire control or dilution water may cause pollution.

13. DISPOSAL CONSIDERATIONS:

13.1 Disposal of Residue:

Residue to be disposed of as for toxic and flammable waste in accordance with local/national regulations. DO NOT burn.

13.2 Disposal of Used Packaging Material:

Rinse empty container three times with a volume of water equal to at least one tenth of that of the container and add the rinsing to the contents of the spray tank before disposing of the container.

Empty containers to be disposed of in accordance with local/national regulations. DO NOT re-use for any other purpose. DO NOT burn.

14. TRANSPORT INFORMATION:

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.