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# COOPERS ENVIRONMENTAL SCIENCE (PTY) LTD.



## Material Safety Data Sheet

Revised on: 1 June 2014

Revision number 5

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### 1. Substance/preparation and company identification

#### PCO DIAZINON<sup>®</sup> CONCENTRATE

Use: Public Health, Insecticide

Company:

Coopers Environmental Science (Pty) Ltd.

Reg. No. 2000/023667/07

P.O. Box 14374

BREDELL 1623

SOUTH AFRICA

TEL: (011) 979-4246/7

Emergency contact numbers

Tygerberg Poison Center: +2721 931 6129

Griffon Poison Information Centre - 082 446 8946

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### 2. Composition/information on ingredients

**Cas Reg No:** Diazinon 333-41-5

**UN No:** 2784

**UMCO:** 6.1;3

Product is essentially an organophosphorous insecticide based on 880g/l active diazinon.

**Description:**

A clear brown, emulsifiable concentrate.

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### 3. Hazard identification

**Hazards: Primary:** - Organophosphorus pesticides, liquid, toxic, flammable, n.o.s.

Contains: Diazinon

**Nature of Hazard:** Slightly hazardous if swallowed, on skin contact or inhalation.

The toxin is an organophosphorus cholinesterase inhibitor;

Symptoms of poisoning may develop after several hours.

Contact with the liquid may cause irritation to eyes and skin.

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

Decomposes in a fire to emit fumes of NO<sub>x</sub>, PO<sub>x</sub> and SO<sub>x</sub>.

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## 4. First-aid measures

### 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.

### 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.

### 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.**

### 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.

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

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## 5. Fire-fighting measures

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

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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. Evacuate all unnecessary persons.

Diazinon decomposes in a fire to emit fumes of NO<sub>x</sub>, SO<sub>x</sub> and PO<sub>x</sub>.

**Fire extinguishing agents to be used: Dry powder; Foam.**

Contain run-off with temporary earth barriers. The material is toxic to fish, bees and birds.

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## 6. Accidental release measures

Nitrile rubber gloves, close fitting safety goggles, effective respiratory protection when necessary, full length protective clothing and boots should be worn when handling this material in an emergency.

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.

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## 7. Handling and storage

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.

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.

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## 8. Exposure controls and personal protection

Diazinon

Good general ventilation should be sufficient for most conditions.  
Local exhaust ventilation may be necessary for some operations

Respiratory Protection:

When airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

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#### Hand/skin Protection:

Use protective clothing impervious to this material. Selection for specific items will depend on operation.

#### Eye/Face Protection:

Use safety glasses. Where contact with the liquid is likely, chemical goggles are recommended.

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### 9. Physical and chemical properties

Description:	A clear, brown emulsifiable concentrate liquid.(EC)
Solubility:	Emulsifiable in water.
Flash point:	22 °C (Closed cup)
Degradation:	In the environment degradation involves oxidation and hydrolysis.

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### 10. Stability and reactivity

Corrosiveness:	Corrosive to iron and some other materials.
Stability:	Susceptible to oxidation above 100°C. Stable in neutral media, but slowly hydrolysed in alkaline media and more rapidly in acidic media.
Compatibility:	Incompatible with alkaline materials (residual toxicity may be decreased).
Fire:	Diazinon decomposes in a fire to emit fumes of NO <sub>x</sub> , PO <sub>x</sub> and SO <sub>x</sub> .

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### 11. Toxicological information (active ingredient)

#### Toxicity:

Product is hazardous if ingested, on skin and inhalation.

Acute oral LD <sub>50</sub> :	1250 mg/kg (rats) 775 – 80 - 135 mg/kg (mice)
Acute percutaneous LD <sub>50</sub> :	> 2150 mg/kg (rats) 540 – 650 mg/kg (rabbits)
Inhalation LC <sub>50</sub> (4h):	> 2330 mg/m <sup>3</sup> (rats)

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### 12. Ecological information

#### **Ecotoxicity**

#### Toxicity to fish:

LC <sub>50</sub> (96h) for bluegill sunfish:	16 mg/l
LC <sub>50</sub> (96h) Rainbow trout:	2.6 – 3.2 mg/l

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LC<sub>50</sub> (96h) Carp: 7.6 – 23.4 mg/l

Highly toxic to bees



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### 13. Disposal considerations

#### Disposal of Residue

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

#### 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.

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### 14. Transport information

UN No:	3017
Class:	6.1
IMDG:	Yes marine pollutant
Ems:	•
MFAG:	•
Subsidiary risk:	•
Packing group:	III

Declaration for land shipment: 3017 ORGANOPHOSPHORUS PESTICIDE , LIQUID , TOXIC , FLAMMABLE

Declaration for sea shipment: 3017 ORGANOPHOSPHORUS PESTICIDE , LIQUID , TOXIC , FLAMMABLE

Declaration for shipment by air: 3017 ORGANOPHOSPHORUS PESTICIDE , LIQUID , TOXIC , FLAMMABLE

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### 15. Regulatory information

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

The product is registered as L 4577 under the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, Act 36, 1947.

Hazard Symbol: Xn – Harmful

Risk Phrases: Flammable. (R10)

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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)

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## 16. Other information

### Classification and labelling

The data given here is based on current knowledge and experience. This Safety Data Sheet describes the product in terms of safety requirements and does not signify any warranty with regard to the product's properties. The information provided about the product on this Safety Data Sheet has been compiled from knowledge of the individual constituents the data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications – usage in such may cause risks not mentioned in the sheet. Do not use for other application(s) without seeking advice from manufacturer. Applicable Laws Refer to the Dangerous Substance Directive (67/548/EEC) Refer to the Dangerous Preparations Directive (88/379/EEC)

**Consult the label for directions for use.**

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THIS INFORMATION CONCERNS ONLY THE PRODUCT AS CONFORMING TO ITS SPECIFICATIONS AND LIMITED TO THE USES HEREIN STATED.

This sheet complements the technical sheet of use but does not replace it. The information contained on this sheet is based on knowledge of the product on the date of publication. It is given in good faith.

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