

COOPERS ENVIRONMENTAL SCIENCE (PTY) LTD

Material Safety Data Sheet

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

1.1 Product Name:

Mosfog

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

2.1 Chemical nature: Oil solution (FN/KN)

Hazardous components:

Pyrethrins and Piperonyl Butoxide:

Warning! According to the classification provided this substance is very toxic to aquatic life with long lasting effects, is very toxic to aquatic life, is harmful if swallowed, is harmful in contact with skin and is harmful if inhaled.

Petroleum Oil:

Danger! According to the harmonised classification and labelling (CLP00) approved by the European Union, this substance may cause cancer

2.2 Label elements

Hazard pictograms:



Signal word: **DANGER**

Hazard statements:

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.
H370 Causes damage to organs.
H410 Very toxic to aquatic life with long lasting effects.

2.3 Supplemental Hazard Statements:

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements:

P102 Keep out of reach of children.

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

2.4 Response:

P301 + P310 IF SWALLOWED:

Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P308 + P311 IF exposed or concerned:

Call a POISON CENTER/doctor.

P331 Do NOT induce vomiting.

P370 + P378 In case of fire:

Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P391 Collect spillage.

2.5 Disposal:

P501 Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as nonhazardous waste.

3. COMPOSITION INFORMATION ON INGREDIENTS:

Hazard statements according to Regulation (EC) No. 1907/2006

3.1 Mixtures

Components

3.2 Hazardous ingredients

CAS NO	HAZARDOUS COMPONENT	CONCENTRATION	GHS CLASSIFICATION
8003-34-7	Pyrethrins	0.5 %	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Acute 1, H400

			Aquatic Chronic 1, H410	
51-03-6	Piperonyl Butoxide	4 %	Aquatic chronic 1	H410
			Aquatic Acute 1	H400
			Aquatic Chronic 2	H411
			Repr.2	H361
			Not Classified	
			Acute Tox. 1	H330
			Acute Tox. 2	H310
			Acute Tox. 3	H331
			Acute Tox. 3	H311

4. FIRST AID MEASURES:

4.1 Skin contact: Remove contaminated clothing, rinse the affected skin area with plenty of soap and cool water or shower. DO NOT rub skin hard.

4.2 Eye contact: Immediately wash eyes with copious amounts of clean water for at least 15 minutes, cover with a sterile pad, contact a doctor.

4.3 Ingestion: Keep patient calm and reassured, rinse mouth with clean water. Never give anything by mouth to an unconscious person. DO NOT apply direct mouth to mouth respiration, use a disposable protective mouthpiece.

4.4 Inhalation: 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: Treat symptomatically. No specific antidote known. The product contains a synergist which may make a person temporarily vulnerable to a variety of toxic insults which would normally be tolerated with ease.

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

5. FIRE FIGHTING MEASURES:

Personnel involved in a fire situation with this material should wear self-contained breathing apparatus as acid smoke and irritating fumes may be given off. No unprotected person should be allowed in the vicinity. Decomposes in a fire to emit acid smoke and irritating fumes.

5.1 Fire extinguishing agents to be used: Foam.
Contain run-off with temporary earth barriers.

5.2 Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent firefighting water from entering the environment.

6. ACCIDENTAL RELEASE MEASURES:

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Use personal protective equipment as required.

6.2 For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.3 For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.4 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.5 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.6 Reference to other sections

See Heading 8. Exposure controls and personal protection.

7. HANDLING AND STORAGE:

Storage:

Store away from children and pets. Store in a cool, dry place away from sources of heat. Store away from farm feeds, foodstuffs and eating utensils. Store away from alkaline materials.

Cleaning of equipment after use:

Clean protective clothing. Used protective clothing and the workers' personal clothing shall be kept apart. At the end of each day, all protective clothing and respirators shall be decontaminated, washed, rinsed and dried. Extra care must be taken when cleaning equipment after use.

Handling precautions:

Wash with soap and water after use. Avoid excessive wetting of plastic, rubber or asphalt surfaces. During application and when cleaning equipment contamination of all sources of drinking water, rivers, dams, crops or grazing shall be prevented. The material is toxic to fish and bees.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION:

8.1 Pyrethrins (8003-34-7)

EU Local name Pyrethrum

EU IOELV TWA (mg/m³) 1 mg/m³

Chemical resistant gloves, safety goggles or face shield, adequate ventilation or effective respiratory protection, full length protective clothing and boots should be worn when handling this material in an emergency.

8.2. Exposure controls

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eye protection:

Chemical goggles or safety glasses

Respiratory protection:

Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Description:	A clear liquid
Colour:	Honey / light viscose yellow
Odour:	Paraffinic
Solubility:	Not soluble in water
Flash point:	About 142 °C
Degradation:	In the environment, degradation promoted by sunlight and UV light. In mammals, rapidly degraded in the stomach by hydrolysis of the ester bond to harmless metabolites.
pH:	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Vapour pressure:	No data available

10. STABILITY AND REACTIVITY:

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

Not established. The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

None expected under normal conditions of handling and use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizing agent.

11. TOXICOLOGICAL INFORMATION:

11.1 Toxicological information on inerts:

The product is moderately hazardous if inhaled, swallowed and on skin contact.

(pyrethrins)

LD50 acute oral, rats:	2370 mg/kg
LD50 acute dermal, rats:	> 1 500 mg/kg
LC50 inhalation:	3.4 mg/l air

(piperonyl butoxide)

LD50 acute oral, rats: 7 500 mg/kg
LD50 acute dermal, rats: > 7950 mg/kg
LC50 inhalation: 5.9 mg/l air

11.2 Toxicological information on formulated product:

Acute Oral 134 353,741 mg/kg
Acute Dermal 119 548,872 mg/kg
Acute Inhalation 121,208 mg/l air

12. ECOLOGICAL INFORMATION:

Ecotoxicity

Toxicity to fish:

Rainbow trout/LC50 (96 h): 0.009 mg/l
Bluegill LC50 (96 h): 10 µg/l

Aquatic invertebrates:

Daphnia magna/LC50 (48 h): 12 µg/l

Toxicity to birds:

Mallard duck LD50: >10000 mg/kg

Persistence and degradability:

Rapidly oxidizes in presence of sunlight DT50 10-12 days

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment.

13. DISPOSAL CONSIDERATIONS:

Regional legislation (waste): Disposal must be done according to official regulations.

Waste treatment methods: Empty containers to be disposed of as toxic waste in accordance with local/national regulations. DO NOT re-use for any other purpose.

Product/Packaging disposal recommendations:

Dispose of contents/container in a safe manner in accordance with local/national regulations.

Ecology - waste materials: Avoid release to the environment

14. TRANSPORT INFORMATION:

UN No: 3082
Class: 9
Packing group: III

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S
IMDG: -
Ems: -
MFAG: -
Subsidiary risk: •

Declaration for land shipment: 3082 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (pyrethrin solution)

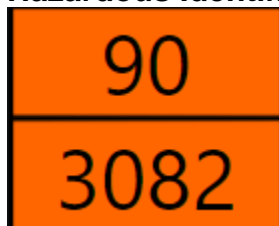
Declaration for sea shipment: 3082 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (pyrethrin solution)

Declaration for shipment by air: 3082 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (pyrethrin solution)

Labels :



Hazardous Identification Number :



15. REGULATORY INFORMATION:

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

WHO classification: III

R-phrase(s): R 20, 21, 22, 50, 51

S-phrase(s): S 2, 23, 24

15.2 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.

15.3 Chemical Safety Assessment

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

16. OTHER INFORMATION:

Revised on: 6/1/2021
Revision number 5

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.