
Coopers Environmental Science (Pty) Ltd

Material Safety Data Sheet

7 NOVEMBER 2017

VERSION: 2

1. Substance/preparation and company identification

MOSPRAY

Use: Post harvest grain treatment, Insecticide

Company:

STARPLEX 83 CC

Reg. No. 2004/01564/23

P.O. Box 14374

BREDELL 1600

SOUTH AFRICA

TEL: (011) 979-4246/7

Emergency contact numbers

Tygerberg Poison Center: +2711 931 6129

2. Composition/information on ingredients

Hazardous ingredients

Pirimiphos-methyl	500 g/kg
CAS Number: [29232-93-7	

3. Hazard identification

Organophosphorus pesticides, liquid, toxic, flammable, n.o.s.

Contains: Pirimiphos-methyl.

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: 42 °C (Closed Cup).

Decomposes in a fire to emit fumes of NO₂ and SO₂.

4. First-aid measures

General advice:

Avoid contact with the skin, eyes and clothing. Remove contaminated clothing. If difficulties occur:

Obtain medical attention. Show container, label and/or safety data sheet to physician.

If inhaled:

The toxin is an organophosphorus cholinesterase inhibitor; may cause headache, fatigue, faintness, giddiness, excessive sweating, nausea, abdominal pains, vomiting, diarrhoea, tightness of the chest, anxiety, blurred vision, 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.

On 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.

On contact with eyes:

Irritating, may cause redness, pain, blurred vision, conjunctivitis.

Immediately wash eyes with copious amounts of clean water for at least 15 minutes, cover with sterile pad.

On ingestion:

The toxin is an organophosphorus cholinesterase inhibitor; may cause headache, fatigue, faintness, giddiness, excessive sweating, nausea, abdominal pains, vomiting, diarrhoea, tightness of the chest, anxiety, blurred vision, 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.

5. Fire-fighting measures

Suitable extinguishing media:

Water spray, water fog, carbon dioxide, foam

Specific hazards:

Special protective equipment:

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

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. 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.

6. Accidental release measures

Personal precautions:

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Remove contaminated clothes, undergarments and shoes immediately.

Environmental precautions:

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

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Cleaning operations should be carried out only while wearing breathing apparatus. 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.

7. Handling and storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas.

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.

Storage

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture.

Protect

from direct sunlight.

Storage stability:

Storage duration: 24 Months

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated

temperature for extended periods of time.

8. Exposure controls and personal protection

Pirimiphos-methyl

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.

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.

9. Physical and chemical properties

Description:	A clear brown slightly viscous, emulsifiable concentrate liquid. (EC)
Form:	Liquefied gas
Specific gravity:	1.29 g/ml
Flash point:	42°C (Abel closed cup)
Solubility in water:	Product is miscible in water.

10. Stability and reactivity

Corrosiveness:	Pirimiphos-methyl is corrosive to tinplate and mild steel.
Stability:	Pirimiphos-methyl hydrolysed by concentrated acids and alkaline.
Compatibility:	Mixing with strongly alkaline or acid substances should be avoided.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Non hazardous reactions when stored and handled according to prescribed instructions.	

11. Toxicological information (active ingredient)

LD ₅₀ /oral/rat/male/female:	1414 mg/kg
LC ₅₀ /by inhalation/rat/male/female:	5.04 mg/l / 4 h
LD ₅₀ /dermal/rat/male/female:	>2000 mg/kg
Skin irritant:	slightly irritating.
Sensitization/guinea pig:	Mild skin sensitizer.

12. Ecological information

Ecotoxicity

Toxicity to fish:		
Rainbow trout/LC ₅₀ (96 h):	0.64 mg/l	
Mirror Carp LC ₅₀ (96 h)		1.4 µg/l
Aquatic invertebrates:		
Daphnia magna/LC ₅₀ (48 h):	021 µg/l	
Toxicity to birds:		
Mallard duck LD ₅₀ :	1695 mg/kg	

Persistence and degradability

Degradation in soil and water is rapid.

Additional information

Other Eco toxicological advice:
Do not discharge product into the environment.

13. Disposal considerations

Must be dumped or incinerated in accordance with local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

Destroy the empty container by perforating and flattening and dispose of as toxic waste in accordance with local/international regulations. DO NOT re-use for any other purpose.

14. Transport information

Land transport

UN No:	3017
Class:	6.1
IMDG:	6194
Ems:	6.1-01
Packaging group:	III
Declaration for land shipment:	3017 ORGANOPHOSPHOROUS PESTICIDE, LIQUID, TOXIC FLAMMABLE
Declaration for sea shipment:	3017 ORGANOPHOSPHOROUS PESTICIDE, LIQUID, TOXIC FLAMMABLE
Declaration for sea shipment:	3017 ORGANOPHOSPHOROUS PESTICIDE, LIQUID, TOXIC FLAMMABLE

15. Regulatory information

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

WHO classification III

R-phrase(s)
R 10, 22, 39

S-phrase(s)
S 2, 13, 20/21, 24, 62

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.
