

COOPERS ENVIRONMENTAL SCIENCE (PTY) LTD

Material Safety Data Sheet

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

1.1 Product Name:

Grainfos Grainguard

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 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226:

Flammable liquid and vapour.

Acute toxicity, Category 4 H302:

Harmful if swallowed.

Serious eye damage, Category 1 H318:

Causes serious eye damage.

Skin sensitisation, Category 1 H317:

May cause an allergic skin reaction.

Specific target organ toxicity – single exposure, Category 1 H370:

Causes damage to organs.

Specific target organ toxicity – single exposure, Category 3, Central nervous system H336:

May cause drowsiness or dizziness.

Specific target organ toxicity – single exposure, Category 3, Respiratory system H335:

May cause respiratory irritation.

Aspiration hazard, Category 1 H304:

May be fatal if swallowed and enters airways.

Short-term (acute) aquatic hazard, Category 1 H400:

Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Category 1 H410:

Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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.

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.

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.

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.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

This product contains an anticholinesterase compound. Do not use if under medical advice not to work with such compounds.

3. COMPOSITION INFORMATION ON INGREDIENTS:

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

3.1 Mixtures

Components

CAS NO	HAZARDOUS COMPONENT	CONCENTRATION	GHS CLASSIFICATION
Pirimiphos-methyl (ISO)	29232-93-7	500 g/l	Acute Tox. 4; H302 STOT SE 1; H370 Aquatic Acute 1; H400 Aquatic Chronic 1; H410

4. FIRST AID MEASURES:

4.1 Description of first aid measures

General advice:

Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.

If inhaled:

Move the victim to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.

In case of skin contact:

Take off all contaminated clothing immediately.
Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.
Wash off immediately with plenty of water.

In case of eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Immediate medical attention is required.

If swallowed: If swallowed, seek medical advice immediately and show this container or label.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed Symptoms: Poisoning produces effects associated with anticholinesterase activity which may include:

Nausea
Diarrhoea
Vomiting

4.3 Indication of any immediate medical attention and special treatment needed Treatment:

Consider taking venous blood for determination of blood cholinesterase activity (use heparin tube). Administer atropine sulphate as antidote. Specific antidotes are oximes (e.g. Pralidoxime) or Toxogonin

5. FIRE FIGHTING MEASURES:

5.1 Suitable extinguishing media:

Water spray, water fog, carbon dioxide, foam

5.2 Specific hazards:

Special protective equipment:

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

Further information:

Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray. In case of fire and/or explosion do not breathe fumes. 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.

5.3 Special hazards arising from the substance or mixture

Specific hazards during firefighting:

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to health. Flash back possible over considerable distance.

6. ACCIDENTAL RELEASE MEASURES:

6.1 Personal precautions:

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

6.2 Environmental precautions:

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

6.3 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:

7.1 Handling:

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

7.2 Storage

Segregate from foods and animal feeds.

7.3 Further information on storage conditions:

Keep away from heat. Protect against moisture. Protect from direct sunlight.

7.4 Storage stability:

Storage duration: 24 Months

7.5 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 CONTROL AND PERSONAL PROTECTION:

8.1 Tolerable Exposure Limit: None established

8.2 Workplace Exposure Standards: None established

8.3 Engineering Controls: Select spray application equipment to minimize exposure to operator and bystanders

8.4 Biological Monitoring: Regular users in direct contact (mixing and application) should undergo biological monitoring of cholinesterase activity. Consult with your GP or Occupational Health Adviser.

8.5 Personal Protection:

Eye Safety: Glasses/goggles (or full-face respirator incorporating visor) when mixing or applying.

Skin: Chemical resistant coveralls with hood tightly fitting at head, wrists, and ankles (e.g., Tychem F suit), chemical resistant boots and chemical resistant gloves (barrier multilayer, nitrile, neoprene, butyl).

Respiratory: Not required where vapour or spray mist is not inhaled. Otherwise, respirator (organic vapour and particulate matter) is required.

Clean protective equipment after use.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Description:	A clear brown slightly viscous, emulsifiable concentrate liquid. (EC)
Form:	Liquid suspension
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:

10.1 Reactivity:	None reasonably foreseeable.
10.2 Chemical stability:	Stable under normal conditions.
10.3 Possibility of hazardous reactions:	Hazardous reactions : No dangerous reaction known under conditions of normal use.
10.4 Conditions to avoid:	No decomposition if used as directed.
10.5 Incompatible materials:	
Materials to avoid:	None known.
10.6 Hazardous decomposition products:	
Hazardous decomposition products:	No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION:

11.1 Information on toxicological effects

Information on likely routes of exposure:

Ingestion
Inhalation
Skin contact
Eye contact

Toxicity Active ingredient:

Pirimiphos methyl:

LD50/oral/rat/male/female:	1414 mg/kg
LC50/by inhalation/rat/male/female:	5.04 mg/l / 4 h
LD50/dermal/rat/male/female:	>2000 mg/kg
Skin irritant:	Slightly irritating.
Sensitization/guinea pig:	Mild skin sensitizer.

Toxicity Formulated product:

Acute Oral LD50:	2828 mg/kg
Acute Dermal LD50:	4000 mg/kg
Acute Inhalation LC50:	10.08 mg/l air

12. ECOLOGICAL INFORMATION:

Ecotoxicity

Toxicity to fish:

Rainbow trout/LC50 (96 h): 0.64 mg/l
Mirror Carp LC50 (96 h): 1.4 µg/l

Aquatic invertebrates:

Daphnia magna/LC50 (48 h): 0.21 µg/l

Toxicity to birds:

Mallard duck LD50: 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:

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
Label:



Hazardous Identification Number:

663
3017

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.