

ISSUE TIME: OCT 7, 2007

Material Safety Data Sheet

1. Identification of the substance/preparation and company/undertaking

Product: Propiconazole 500 g/L EC
Recommended Uses: Agricultural Fungicide
Manufacturer / Supplier: Rehwar Chemical Co., Ltd.
Address: No.55 Dujuan Road, Pudong New Area, Shanghai, China.
Telephone Number: +86-21-38767520
Fax Number: +86-21-58775125
E-mail: sales@rehwar.com

2. Composition/Information on Ingredients

Component	CAS Registry No.	Conc. g/L
Propiconazole	60207-90-1	500

3. Hazards Identification

Toxicity - This product is slightly hazardous (WHO Hazard Class III)

Swallowed: **SLIGHT TOXICITY**

Tests on rats indicate a slight toxicity following single doses of undiluted product. (LD₅₀ = 2105 mg/kg)

Dermal **SLIGHT TOXICITY**

absorption: Tests on rats indicate a slight toxicity following skin contact with undiluted product.

(LD₅₀ >2500 mg/kg, active ingredient)

Inhaled: **SLIGHT TOXICITY**

Tests on rats indicate a slight toxicity following inhalation of undiluted product.

(LC₅₀ (4h) > 1.0 mg/L, highest attainable concentration)

Irritation

Eye: (rabbit) **SLIGHT-IRRITANT**

Skin: (human experience) **SLIGHT-IRRITANT**

Sensitisation

Skin: **Propiconazole technical** did not induce a sensitising reaction in guinea pigs.

The sensitising potential of the **hydrocarbon liquid** is not known.

Poisoning Symptoms

No cases of human poisoning are on record. The poisoning symptoms observed for laboratory animals were non-specific.

4. First Aid Measures

If poisoning occurs by any exposure route contact a doctor

Swallowed: DO NOT induce vomiting. Give a glass of water. Get to a doctor.

Eye: Flush with large quantities of clean tap water for at least 15 minutes.

Skin: Remove contaminated clothing and wash affected areas thoroughly with soap and water.

Inhaled: Move affected person to fresh air and keep at rest until recovered. If not breathing, give artificial respiration and get to a doctor.

ADVICE TO DOCTOR

No specific antidote exists. Treat symptomatically.

5. Fire-fighting Measures

This product is non-flammable and non-explosive. Product is combustible. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator.

6. Accidental Release Measures

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- Avoid contamination of waterways.

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and PVC gloves.
- (3) Reposition any leaking containers so as to minimise further leakage.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
 - For quantities up to 50 L of product bury in a secure landfill site.
 - For quantities greater than 50 L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable

7. Handling and Storage

- Handling:** Keep product in original tightly closed container. Avoid inhalation of particles. Provide appropriate exhaust ventilation at places where dust is formed.
Do not get on skin, eyes or clothing. Do not eat, drink or smoke when handling. Wash hands before eating, drinking or smoking.
- Storage:** Store in a dry area in the original containers, access should only be for authorised persons.
Store away from animal foodstuffs, seeds and fertilisers.
Stable under recommended storage conditions.

8. Exposure Controls/Personal Protection

EXPOSURE STANDARDS

No exposure standards have been established for the components of this product.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. Inhalation is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

Re-entry Period - Do not enter treated areas without protective clothing until the spray has dried.

9. Physical and Chemical Properties

Appearance:	Clear yellowish liquid	Behaviour in water:	Emulsifiable
Odour:	Non-specific	Flash Point:	>61°C (closed cup)
Specific gravity (H₂O=1)	0.99 (20°C)	Flammability:	Non-flammable
Combustibility:	C1 - combustible	Volatility:	Not available
Viscosity:	Not available	Corrosiveness:	Non-corrosive

10. Stability and Reactivity

- Stability:** Stable under normal conditions of storage
- Materials to avoid:** None under normal conditions of use.

11. Toxicological Information

For acute toxicity refer to above item 3, HAZARD IDENTIFICATION:

CHRONIC (Active Ingredient)

Propiconazole technical has been extensively tested on laboratory mammals and in test-tube systems. Chronic administration of large doses of **propiconazole technical** was associated with an increased liver tumour incidence in mice but not in rats. This proved to be related to a promotive effect of **propiconazole technical** on proliferative changes genetically pre-existing in mice and therefore has no relevance to humans. No evidence of mutagenic, teratogenic or reproductive effects was obtained.

The **hydrocarbon liquid** may cause narcosis and central nervous system depression following prolonged over-exposure.

12. Ecological Information

Propiconazole technical is toxic to fish, aquatic invertebrates and green algae; and practically non-toxic to birds and bees. Acute toxicity studies with catfish, rainbow trout, carp, bluegill, golden orfe and the marine spot gave LC₅₀ values from 2.2 to 6.8 mg/L. The EC₅₀ for *Daphnia magna* and the Mysid shrimp were 4.8 mg/L and 0.5 mg/L, respectively. Toxicity studies on freshwater algae and two diatom species showed EC₅₀ values ranging from 0.02 mg/L to 13.6 mg/L.

13. Disposal Considerations

Dispose of empty, used containers by:

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank.
DO NOT dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. Transport Information

Transport Classification – Sea (IMDG):

UN No.: 3082

Class: 9

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Packing Group: III

Additional Information: PROPICONAZOLE 25%, MARINE POLLUTANT

15. Regulatory Information

None

16. Other Information

Disclaimer:

The information contained in this MSDS is designed to give general health and safety guidance on the storage and transport of the substance/preparation to which it relates. Requirements arising from a Risk Assessment of the substance/preparation in a particular working environment should take precedence over any of the guidance contained in this MSDS where there is a difference in the information given. The information contained in this MSDS is accurate at the date of publication and will be updated as and when appropriate. Liability will not be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this MSDS.