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

Product name TOMICIDE ZPT-50
Use
Company name: Mitsubishi Chemical Corporation
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2. Hazards identification

Health hazards Slight acute toxicity is shown on oral intake.
Avoid inhalation and direct handling.
Environmental hazards Dangerous for the environment. Take precautions to prevent the substance entering drains, surface water, and soil.
Fire and explosion: Incombustible.

3. Composition/information on ingredients

Substance/Mixture: 50% Aqueous suspension of zinc pyrithione

Components	Chemical formula	Conc (%)	CAS No.
Zinc pyrithione ^a	C ₁₀ H ₈ N ₂ O ₂ S ₂ Zn	47.5% ~ 50.0%	13463-41-7

^a Chemical name: Zinc, bis(2-pyridylthio)-, 1,1'-dioxide

4. First-aid measures

Inhalation: If inhalation of the product is suspected, remove exposed person to fresh air, and give rest. If the patient continues to feel unwell, obtain medical attention. For difficulties in breathing, give oxygen and seek immediate medical attention.
Skin contact: Remove contaminated clothing and wash affected area with soap and water. Get medical attention if irritation occurs. Launder contaminated clothing before re-use.
Eye contact: In case of contact with eyes, irrigate with water for 15 minutes, occasionally lifting eyelids. Seek medical advice if irritation (pain, redness, or swelling) or other symptoms persist.
Ingestion: If swallowed, wash out mouth thoroughly and give water to drink. Seek immediate medical attention. Do not induce vomiting, unless instructed by medical personnel.

5. Fire-fighting measures

The Product has no risk of fire under normal conditions.

6. Accidental release measures

In case of a large spill, blockade the spill with earth and sand so as not to flow direct into drains and scoop into suitable containers. Treat the spilled product with calcium hydroxide and dispose of into drains. (If the spill is disposed of direct into drains, it may give bad effects to the activated sludge.)

In case of a small spill, wipe off with an absorbent such as paper or cloth.

7. Handling and storage

Information for safe handling: Avoid eye, skin and clothing contact. Wear suitable protective clothing and equipment. Protect the Product from being infected by bacteria.

Storage: Protect from direct sunlight. Store above 0°C as the Product freezes below the freezing point.

8. Exposure controls/personal protection

Occupational exposure limits: None

Engineering measures: Local exhaust ventilation is recommended for handling of the substance. Good general ventilation and enclosed machinery may be sufficient.

Personal protective equipment: For industrial use, avoid skin contact by wearing chemical resistant gloves (eg PVC, nitrile) and safety goggles. Where more extensive contact may occur, wear suitable protective clothing (eg apron, sleeves, boots).

Wear suitable respiratory protective equipment (breathing mask), if exposure may occur.

9. Physical and chemical properties

Appearance: White to slightly grayish aqueous suspension. Has a slightly specific odor.

Specific Gravity: Approximately 1.26

Boiling Point: 100°C (as water)

Melting Point: Zinc pyrithione: Approximately 240°C (decompose)

Vapor Pressure: Not applicable.

Flash Point: Not applicable.

Ignition Point: Not applicable.

Explosion Limits: Not applicable.

Solubility: Hard to dissolve in water. Soluble in sodium hydroxide.

10. Stability and reactivity

Stable under recommended storage and handling conditions.

Conditions to avoid: Avoid prolonged storage at high temperature or exposure to sunlight.

Hazardous decomposition products: None known. No hazardous polymerisation.

11. Toxicological information

Acute toxicity: Oral LD ₅₀	(rat ♂) * ¹ 662mg/kg	(rat ♀) : 584mg/kg	* ¹
Dermal LD ₅₀	3275 mg/kg		* ¹
Corrosivity/irritation:	No abnormality was observed at a skin corrosiveness test using rabbits. * ¹		
Sensitisation:	No information available.		
Repeated-dose toxicity:	No information available.		
Mutagenicity:	Negative		* ²
Reproductive toxicity and carcinogenicity:	No information available.		

12. Ecological information

Mobility:	The substance is an involatile and insoluble solid.		
Persistence/degradability:	No information available.		
Bioaccumulation:	0 % (BOD)		* ³
Toxicity:	LC50(Fish 96H)	< 1.0mg/L	* ¹
	EC50(Daphnia magna)	< 1.0mg/L	* ¹

13. Disposal considerations

Disposal must be in accordance with current national and local regulations. Chemical residues generally count as special waste, and their disposal may be regulated in your country through corresponding laws and regulations.

14. Transport information

UN classification:	UN 3082 Class 9 (P.G. 3)
Proper shipping name:	Environmentally Hazardous Substance, Liquid, N.O.S.
Technical shipping name:	50% liquid of Zinc pyrethione
Safety Measures or Condition:	In case of transportation accident, contact immediately the manufacture.

15. Regulatory information

Follow all laws and regulations in your country.

16. Other information

References

- *1. The Company's own testing data A
- *2 Journal of Applied Toxicology, Vol.13 (4), 283-289 (1993)
- *3 NITE (2002)

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