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MATERIAL SAFETY DATA SHEET

MSDS No: MSDS/THIA/FG-013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ProductName	: Thiamethoxam Technical
IUPAC Name	: 3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine.
Manufacturer / Supplier	: Bharat Rasayan Limited 1501, Vikram Tower, Rajendra Place, New Delhi – 110008, INDIA
Emergency Phones	: +91-11-43661120,1104 Fax 43661100

2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Thiamethoxam	153719-23-4	98.0
Other ingredients		2.0

3. Hazards Identification

Causes mild eye and skin irritation. Can decompose at high temperatures forming toxic gases.

4. First Aid Measures

Have the product container, label or Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment. If swallowed: Call a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling a poison control center or doctor. Do not give anything by mouth to an unconscious person. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20

minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Skin Contact: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Inhalation: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

5. Fire-Fighting Measures

Flash Point (Test Method):208°F

Unusual Fire, Explosion and Reactivity Hazards:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire:

Use dry chemical, foam or CO₂ extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. Accidental Release Measures

In Case of Spill or Leak:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in

7. Handling and Storage

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Section 8. Exposure Controls/Personal Protection

Cover entire spi23ll with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for

9. Physical and Chemical Properties

Melting Point: 135°C

Density: 1.57 at 20°C

Vapor pressure: 6.6×10^{-9} Pa 20°C

Solubility: soluble in water (4.1g/L) and organic solvents: acetone (48g/L), methanol (13g/L)

Boiling Point: Not Available

PH: 5 - 7 (1% suspension in water)

10. Stability and Reactivity

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

Can decompose at high temperatures forming toxic gases.

Hazardous Decomposition Products:

Materials to Avoid: None known.

11. Toxicological Information

Ingestion: Oral (LD50 Rat): > 5,000 mg/kg body weight

Dermal: Dermal (LD50 Rabbit): > 2,000 mg/kg body weight

Inhalation: Inhalation (LC50 Rat): > 2.67 mg/l air - 4 hours

Eye Contact: Minimally Irritating (Rabbit)

Skin Contact: Slightly Irritating (Rabbit)

Skin Sensitization: Not a Sensitizer (Guinea Pig)

12. Ecological and Ecotoxicological Information

Summary of Effects: Practically non-toxic to fish, invertebrates and birds.

Highly toxic to bees.

Eco-Acute Toxicity: Bees LC50/EC50 0.024 ug/bee

Invertebrates (Water Flea) LC50/EC50 > 100 ppm

Fish (Trout) LC50/EC50 > 100 ppm

Fish (Bluegill) LC50/EC50 > 114 ppm

Birds (8-day dietary - Bobwhite Quail) LC50/EC50 > 5,200 ppm

Birds (8-day dietary - Mallard Duck) LC50/EC50 > 5,200 ppm

Environmental Fate:

The information presented here is for the active ingredient, thiamethoxam.

Not persistent in soil. Stable in water. Moderate mobility in soil. Floats in water (after 24 h).

13. Disposal Considerations

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local health and environmental regulations.

14. Transport Information:

14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Thiamethoxam)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Thiamethoxam)

IATA: Environmentally hazardous substance, solid, n.o.s. (Thiamethoxam)

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: no IATA: yes

15. Regulatory Information

Hazard symbols:

H302 Harmful if swallowed.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects

Safety phrase:

S45 In case of accident or if you feel unwell seek medical advice immediaty (show the lebel where

16. OTHER INFORMATION

The information provided in this MSDS is of general nature not specific for a particular purpose or situation, and believed to be correct and faithful. **Bharat Rasayan Limited**

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