

### MATERIAL SAFETY DATA SHEET

PRODUCT : Thiamethoxam 25% WG

PRODUCT DESIGNATION : Insecticide

#### **Section 1. Product & Company Identification**

Common Name : Thiamethoxam 25% WG  
Grade : Formulation  
Active Ingredient : Thiamethoxam  
Chemical Name of Active Ingredient (IUPAC) : (EZ)-3-(2-chloro-1,3-thiazol-5-ylmethyl) -5-methyl-1,3,5-oxadaizinan-4-ylidene (nitro) amine  
Chemical Family of A. I. : Neonicotinoid  
Molecular Formula of A. I. :  $C_8H_{10}ClN_5NO_3S$   
Molecular Mass of A. I. : 291.71 g/mol  
Manufacturer & Supplier : **M/s United Chemicals**  
**Head office:**B-371, 1<sup>st</sup> Floor, Meera Bagh, New Delhi,  
**Factory:**15/1, 15/2, 15/3, industrial Estate, Vidisha,  
(M.P)  
Telephone Number : +91-11-25258770

#### **Section 2. Composition / Information on Ingredients**

| Identity                                    | % W/W content |
|---|---------------|
| Thiamethoxam, a.i.                          | 25.00         |
| Dispersing Agent –sodium Lignosulphate      | 5.00          |
| Weting Agent Sodium Lauryl Sulphate         | 3.75          |
| Plasticiser-Butylated polyvinyl pyrrolidone | 1.25          |
| Carrier Diatomaceous earth                  | 5.00          |
| Binder corn starch                          | Q.S           |
| <b>Total</b>                                | <b>100.00</b> |

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### Section 3. Hazards Identification

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#### Emergency Overview

**Appearance and odour:** Beige to brown and musty odor.

**Warning Statements:** Keep out of reach of children

**Potential Health Effects Likely Routs of Exposure:** Skin contact, Inhalation and Ingestion.

**Eye Contact:** May cause moderate eye irritation due to inerts.

**Skin contact:** May cause mild skin irritation due to inerts.

**Ingestion:** May be harmful if swallowed. Overexpose to the product may cause irritation of the gastrointestinal tract.

**Inhaled:** May be harmful by inhalation. May cause irritation of the nose, throat and respiratory tract.

**Other effects:** Thiamethoxam has relatively low acute and chronic toxicity in mammals. There was no evidence of carcinogenicity, neurotoxicity, mutagenicity and/or endocrine disruption

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### Section 4. First Aid Measures

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#### Emergency and First Aid Procedure –

**If in Eyes:** Immediately flush eyes with copious amounts of clean, cold water for at least 15 to 20 minutes, holding the eyelid(s) open. Obtain medical attention if irritation persists.

**If on Skin:** Remove contaminated clothing, shoes and leather goods. Wash skin gently and thoroughly with clean, cold water and non-abrasive soap. Obtain medical attention if irritation persists.

**If Inhaled:** If irritation has developed, remove the source of contamination or move victim to fresh air. The patient should be kept under observation and obtain medical attention if irritation persists.

**If Swallowed:** Do not induce vomiting. Do not give anything by mouth to an unconscious person. Obtain medical attention immediately and make the container, or label or Safety Data Sheet available.

**Note to Physician** No specific antidote is available. Treat symptomatically and supportively.

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### Section 5. Fire Fighting Measures

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**Unsuitable extinguishing media:** High Pressure water jets may scatter spilled material.

**Extinguishing Media:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide

**Special Protective Equipment:** Wear self-contained breathing apparatus and protective suit.

Use standard fire fighting procedures and consider the hazards of involved material.

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### Section 6. Accidental Release Measures

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Wear protective gloves/protective clothing/eye protection/face protection.

**Personal Precautions:** Avoid dust/mist formation. Do not eat, drink or smoke while using this product. Avoid contact with skin and eyes. Avoid breathing dust/mist. Keep unnecessary people away. Isolate area. Keep out of low areas.

**Environmental Precautions:** Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

**Steps to be taken in case of a spill:** Pick and arrange disposal without creating dust. Sweep up and shovel into suitable container for disposal. Follow all label instructions regarding spill clean-up and residual disposal methods.

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### Section 7. Handling & Storage

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**Precautions in Handling:** Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust/mist. Ensure adequate ventilation. Wash thoroughly after handling. Avoid release to environment. Empty containers may contain hazardous residues. Do not reuse empty container

**Precautions in Storage:** Store in accordance with local regulation. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatible material. Do not store in unlabeled containers. Do not store material near food, feed or drinking water.

**Incompatibles:** Decomposed in alkaline and strong acid.

### Section 8. Exposure Control, Personal Protection

**Respiratory protection:** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Local authorities should be advised if significant spillage cannot be contained.

**Eye Protection:** Avoid contact with eyes. Where there is potential for eye contacts have eye flushing equipment available. Tightly fitting safety goggles. Face-shield.

**Skin Protection:** Wear protective gloves/clothing. Long-sleeved clothing.

**Engineering Control:** Ensure adequate ventilation, especially in confined areas. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Exposure Guidelines: Apply technical measures to comply with the occupational exposure limit.

General hygiene considerations: Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

### Section 9. Physical and Chemical Properties

|                    |                                  |
|--------------------|----------------------------------|
| Appearance / state | : Granules                       |
| Colour             | : Beige to brown                 |
| Odour              | : Musty                          |
| Melting point      | : NA                             |
| Boiling point      | : 160°C (Decomposition)          |
| Vapour pressure    | : NA                             |
| pH                 | : 9.4 (1% aqueous dispersion)    |
| Corrosivity        | : NA                             |
| Density            | : 0.47 g/cm <sup>3</sup> at 20°C |
| Viscosity          | : Not Applicable                 |
| Flash Point        | : Not Applicable                 |



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### Section 10. Stability & Reactivity

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**Chemical Stability:** Stable under normal use and storage condition.

**Possibility of hazardous reaction:** None under normal processing.

**Conditions to Avoid:** Avoid heat, flames and spark.

**Hazardous Decomposition Product:** Thermal decomposition can lead to release of irritating or toxic fumes (or gases) in fire. Thermal hazardous decomposition products: Oxides of carbon, nitrogen, Sulphur and chloride compounds.

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### Section 11. Toxicological Information

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**Health Hazards:** Refer to section no. 3

**Acute Toxicity:** The product is toxic. It should be treated with the usual care of handling hazardous chemicals.

Oral LD50: Rat (male/female) >5000mg/kgb.w.

Skin Contact, Dermal LD50: Rat (male / female) >2000mg/kg

Inhalation, LC50: Rat (male / female) >2.79 mg/L (4 hours)

Eye Irritation: Rabbit (male/female) Mildly-irritating

Skin Irritation: Rabbit (male/female) Slightly-irritating

Skin Sensitization: Guinea Pig, Non-Sensitizer

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### Section 12. Ecological Information

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Acute Oral Toxicity in Birds: In Bob White Quail >3400 mg/kg of body weight

Acute Toxicity in Fish (96 hrs LC<sub>50</sub>) : Rainbow trout : 190 mg/L

Acute Toxicity Honey bees: Oral LC<sub>50</sub> 48 Hrs. 1.20µg/bee

Acute Toxicity in Daphnia Magna: 140 mg/l

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### Section 13. Disposal Consideration

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**Waste Treatment Methods:** Dispose of in accordance with applicable Federal, State, local laws and regulations

Containers: Empty container should be taken for local recycling, recovery or waste disposal.

Do not re-use container. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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### Section 14. Transport Information

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The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Toxic substances under the applicable, ICAO/IATA, IMO, ADG.

#### IMDG Classification

Shipping name : Environmentally Hazardous Substance, Solid N.O.S.  
Class : 9  
Packing group : III  
UN number : 3077  
Marine pollutant : Yes

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### Section 15. Regulatory Information

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Contains : Thiamethoxam 25% WG

Risk Phrases: R21/22, R36/37/38

Safety Phrases: S2, S13, S20/21, S30, S24/25, S36/37/39, S61

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### Section 16. Other Information

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