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### MATERIAL SAFETY DATA SHEET

PRODUCT : Thiamethoxam 70 WS

PRODUCT DESIGNATION : Insecticide

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

Common Name : Thiamethoxam  
Grade : Formulation  
Active Ingredient : Thiamethoxam  
Chemical Name of Active : (EZ)-3-(2-chloro-1,3-thiazol-5-ylmethyl) -5-methyl  
Ingredient (IUPAC) : 1,3,5-oxadaizinan-4-ylidene (nitro) amine  
Chemical Family of A. I. : Neonicotinoid  
Molecular Formula of A. I. : C<sub>8</sub>H<sub>10</sub>ClN<sub>5</sub>NO<sub>3</sub>S  
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.	70.00% w/w
Other Components	30.00% w/w
<b>Total</b>	<b>100.00% w/w</b>

#### **Section 3. Hazards Identification**

##### **Precautionary Statements:**

Wash hands and face thoroughly after handling.

Do not eat, drink or smoke when using this product.

If swallowed: Call a poison center, doctor if you feel unwell. Rinse mouth.

Dispose of contents and container in accordance with local regulations.

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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:** Use dry chemical, foam or CO<sub>2</sub> extinguishing media. If water is used to fight fire, dike and collect runoff.

**Special Protective Equipment:** 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.

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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:** In general personnel handling this material and all conducting equipment should be electrically earthed or grounded. Bulk bags (FIBC) used to contain this material should be Type B, Type C or Type D. Type C bags must be electrically grounded or earthed before powder is charged to or discharged from the bag. If metal or fiber drums are used to contain this material, make certain the metal parts are bonded to the filling equipment and grounded.

**Precautions in 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.

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### Section 8. Exposure Control, Personal Protection

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**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	: White to light brown powder
Colour	: White to light brown
Odour	: Weak
Melting point	: 138-139°C
Vapour Pressure	: 2 x 10 <sup>-11</sup> mmHg @ 68°F (20°C)
pH	: NA
Density	: 0.3 - 0.6 g/cm <sup>3</sup>
Solubility	: 4.1 g/l @ 77°F (25°C)
Flash Point	: 200°C

### Section 10. Stability & Reactivity

**Hazardous decomposition** products Combustion or thermal decomposition will evolve toxic and irritant vapors. Hazardous reactions None known.

**Hazardous polymerization** does not occur. Stable under normal conditions.

**Incompatible materials** Strong oxidizing agents

### Section 11. Toxicological Information

Acute oral LD50	: >1987 mg/kg in rats.
Acute dermal LD50	: > 2000 mg/kg in rats.
Acute inhalation LC50	: >4.02 mg/l /4 hours (rat).
Eye Irritation	: Rabbit (male/female) Slightly- irritating
Skin Irritation	: Rabbit (male/female) Slightly -irritating
Skin Sensitization	: Guinea Pig, Non-Sensitizer



### Section 12. Ecological Information

<b>Fish (Rainbow Trout)</b>	96-hour LC50 > 100 ppm
<b>Bird (Mallard Duck)</b>	LD50 Oral 576 mg/kg
<b>Invertebrate (Daphnia Magna)</b>	48-hour EC50 > 106 ppm Green Algae 4-day EC50 > 97 ppm.

### Section 13. Disposal Consideration

#### Waste Treatment Methods

**A) Product** - Product may be burned in an incinerator equipped with afterburner and scrubber. Excess and expired materials are to be offered to a licensed hazardous material disposal company. Ensure that all Federal and Local regulations regarding the disposal and destruction of this material are followed.

**B) Contaminated Packaging-** Dispose of as above.

**C) Other Considerations-** Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.

### Section 14. Transport Information

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	: Flammable Solid, Organic, N.O.S. (Thiamethoxam)
Class	: 4.1
Packing group	: III
UN number	: 1325
Marine pollutant	: Yes

### Section 15. Regulatory Information

**Pesticide Registration:** This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for

safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

Caution: Harmful if swallowed, absorbed through the skin, or inhaled. Avoid contact with skin, eyes, or clothing. Avoid breathing dust. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Remove contaminated clothing and wash before reuse.

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### Section 16. Other Information

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All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are resented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS. Accordingly, no guarantee or warrantee expressed or implied is made by UNITED CHEMICALS, as to the results to be obtained based upon the user's use of the information, nor does UNITED CHEMICALS, assume any liability arising out of user's use of the information.

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