



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. : C₈H₁₀ClN₅O₃S

Molecular Mass of A. I. : 291.71 g/mol

Manufacturer & Supplier : **M/s PERFECT SOLUTIONS**
Office Add: B-371, Paschim Vihar, New Delhi - 110063 (India)
Factory Add: 15/1, 15/2, 15/3 Industrial Estate, Vidisha - 464001 (M.P)

Telephone Number : +91 8375844625

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
Total	100.00



Section 3. Hazards Identification

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, mutagen city and/or endocrine disruption

Section 4. First Aid Measures

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.

Section 5. Fire Fighting Measures

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.

Section 6. Accidental Release Measures

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.

Section 7. Handling & Storage

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	: 2×10^{-11} mmHg at 20°C
pH	: 9.4 (1% aqueous dispersion)
Density	: 0.47 g/cm ³ at 20°C
Solubility in H ₂ O	: 4.1g/l at (25°C)
Flash Point	: 60°C

Section 10. Stability & Reactivity

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.

Section 11. Toxicological Information

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.

Route(s) of Entry

Ingestion,

Oral LD50: Rat (male/female) >2000mg/kg b.w.

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

Inhalation, LC50: Rat (male / female) > 4.35mg/L (4 hours)

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

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

Skin Sensitization: Guinea Pig, Non-Sensitizer

Section 12. Ecological Information

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

Acute Toxicity in Fish (96 hrs LC₅₀) : Rainbow trout : 190 mg/L

Acute Toxicity Honey bees: Oral LC₅₀ 48 Hrs. 1.20µg/bee

Acute Toxicity in Daphnia Magna: 140 mg/l

Section 13. Disposal Consideration

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.

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 : Environmentallu Hazaedous Substance, Solid
N.O.S.(thiamethoxam 25% WG)
Class : 9
Packing group : III
UN number : 3077
Marine Pollutant : Yes

Section 15. Regulatory Information

Contains : Thiamethoxam 25% WG

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

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

Section 16. Other Information

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 PERFECT SOLUTIONS, as to the results to be obtained based upon the user's use of the information, nor does PERFECT SOLUTIONS, assume any liability arising out of user's use of the information.

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