MATERIAL SAFETY DATA SHEET

THIAMETHOXAM 25% WG

Manufacturer: BR Agrotech Limited
1505, Vikram Tower,
Rajendra Place
New Delhi -110008, India

1. PRODUCT IDENTIFICATION

Product	Thiamethoxam 25% WG
Intended Use	Insecticide
IUPAC Name	(EZ)-3-(2-chloro-1,3-thiazol-5-ylmethyl)-5-methyl-1,3,5-oxadiazinan-4-ylidene(nitro)amine.
Chemical formula	$C_8H_{10}ClN_5O_3S$
CAS No.	153719-23-4

2. HAZARDOUS IDENTIFICATION

Acute Oral Tox. 4	H302

Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Hazard pictogram:

	
GHS07 **exclamation mark**	**GHS09** **environment**

Signal Word: WARNING

3. CHEMICAL COMPOSITION

Chemical Name	**Content (% w/w)**
Thiamethoxam a.i.	25% .
Associated impurities	75%

4. FIRST AID MEASURES

Eyes	**:**	Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention

		without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin	**:**	Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Ingestion	**:**	If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.
Inhalation	**:**	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or Poison Information Centre immediately.
Note to Medical Doctor	**:**	No specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media	**:**	Foam, dry powder, water spray, Carbon dioxide.
		During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion. A dust explosion may release of large quantities of gaseous products; this in turn creates a subsequent pressure rise of

Fire & explosion hazards	**:**	explosive force capable of damaging plant and buildings and injuring people. Combustion products include carbon monoxide (CO), carbon dioxide (CO2), hydrogen chloride, sulfur oxide.
Fire-fighting equipment	**:**	Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. When any large container (including road and rail tankers) is involved in a fire, consider evacuation by 100 metres in all directions.

6. ACCIDENTAL RELEASE MEASURES

Action to take for spills/leaks	**:**	MINOR SPILLS: Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact by using protective equipment. Environmental hazard - contain spillage. MAJOR SPILLS: Environmental hazard - contain spillage. Moderate hazard. CAUTION Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses.

7. HANDLING AND STORAGE

Handling	**:**	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
Storage	**:**	Store in original containers. Keep containers securely sealed. Store in areas that are cool, dry, well-ventilated, and out of reach of children. Do not store near any material intended for use or consumption by humans or animals. Prevent cross-contamination with other pesticides or fertilizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	**:**	Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are. Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes"

		air in the work environment.
Personal protection	**:**	*Eye/face protection*: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. *Skin protection*: Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types. *Respiratory protection*: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). *Applicators and all other handlers*: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	**:**	Light brown fine powder
Solubility in Water	**:**	Miscible
Wet Sieve Test	**:**	Min. 99% material passes through 45 micron sieve.
Acidity (as H2SO4)	**:**	0.5% Max.

10. STABILITY AND REACTIVITY

Stability	**:**	Stable under recommended storage conditions.
Incompatibility	**:**	Not known.
Conditions to Avoid	**:**	Not known.

11. TOXICOLOGICAL INFORMATION

Oral rats	**:**	LD50: 1,950 mg/kg
Dermal rats	**:**	LD50:>2000 mg/kg
Skin irritation rabbits	**:**	Non-irritant
Eyes rabbits	**:**	Non-irritant
Inhalation rats	**:**	Generation of respirable aerosols was not possible in lab test.
Skin sensitization	**:**	Not a skin sensitization

12. ECOLOGICAL INFORMATION

Toxiclty to Fish, Bluegill sunfish	**:**	LC50(96h) : 0.46 µg/L
Toxicity to Bee	**:**	Contact LD50: 1.5 µg/bee for technical
Toxicity to Daphnia	**:**	EC50(48h): 0.62 µg/L
Toxicity to birds, *Anas platyrhynchos*	**:**	LD50: 1500 mg.kg (for technical)

13. DISPOSAL CONSIDERATIONS

Disposal Instruction	**:**	Follow container label instructions for disposal of wastes generated during use in compliance with the product label. In other situations, bury in an EPA approved landfill or burn in an incinerator approved for pesticide destruction. Follow all local/regional/national/international regulations. Do not reuse container.
		This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. In most instances the supplier of the material

		should be consulted.
Disposal Method	**:**	DO NOT allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

14. TRANSPORT INFORMATION

ADR/RID Classification	
Proper shipping Name	Pesticides, solid, toxic, n.o.s. (Thiamethoxam)
UN No.	2588
Packing Group	III
Hazard Class	6.1
IMDG Classification	
Proper shipping Name	Pesticides, solid, toxic, n.o.s. (Thiamethoxam)
UN No.	2588
Packing Group	III

Hazard Class	6.1
IATA/ICAO Classification	
Proper shipping Name	Pesticides, solid, toxic, n.o.s. (Thiamethoxam)
UN No.	2588
Packing Group	III
Hazard Class	6.1

15. REGULATORY INFORMATION

	
GHS07 **exclamation mark**	**GHS09** **environment**

Signal word	**WARNING**
H-Phrase	H302: Harmful if swallowed H332: Harmful if inhaled H313: May be harmful in contact with skin H400: very toxic to aquatic life H410: very toxic to aquatic life with long lasting effects

16. OTHER INFORMATION

This MSDS summarizes best knowledge of the health and safety hazard information of the product. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. BR Agrotech Limited does not make guarantee or warranties of any kind regarding the completeness or accuracy of results obtained upon reliance on these data.

Prepared By : BR Agrotech Limited

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