

MATERIAL SAFETY DATA SHEET

BRIGATA RTU (Deltamethrin 0.05+ Allethrin 0.04%RTU)

Table of Contents:

- | | |
|---|-------------------------------------|
| 1. Identification of the substance/preparation and of the company/undertaking | 9. Physical and chemical properties |
| 2. Composition/information on ingredients | 10. Stability and reactivity |
| 3. Hazards identification | 11. Toxicological information |
| 4. First aid measures | 12. Ecological information |
| 5. Fire-fighting measures | 13. Disposal considerations |
| 6. Accidental release measures | 14. Transport information |
| 7. Handling and storage | 15. Regulatory information |
| 8. Exposure controls/personal protection | 16. Other information |

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: **Deltamethrin 0.05+ Allethrin 0.04%RTU**

Intend use: **Household Insecticide**

Supplier: **FMC INDIA PRIVATE LIMITED**

Embassy Star, No. 8,
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(INDIA)

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Name of the Ingredients	Chemical Group	CAS No.	Percent by weight
Deltamethrin	Pyrethroid	52918-63-5	0.05
Allethrin	Pyrethroid	584-79-2	0.04
Kerosene	Petroleum Solvent	8008-206	Q.S.

3. HAZARDS IDENTIFICATION

Emergency Overview: Harmful if swallows. Many cause moderate eye irritation. Contact with skin, eyes and clothes should be avoided. Wash thoroughly with soap and water after handling in complete.

Physical Status : Ready to use mix in oil,
Appearance : Colorless to pale yellow.
Route of Exposure : Ingestion, Eye and skin contact.

Eyes: Direct contact may cause eye irritation and pain, lacrimation.

Skin Contact: Localized irritation on skin may occur on contact

Ingestion: Do not take internally or do not swallow. If ingested, effects may cause nausea, vomiting and diarrhea.

Inhalation: Avoid contact with sprat mist. If inhaled, effects are usually respiratory and may include cough, etc.

Carcinogenicity: None

Potential environment effect: Toxic to fish and aquatic invertebrate. Do not spray in and around fish tanks or aquarium, closed -confined space.

Spill: Do not touch spilled material. Stop leak if you can do it without risk. Do not spray in and around to reduce vapors. For small spill, take up with sand or other absorbent material and place into container for later disposal. For small dry spills, with a clean shovel place material into clean, dry container and cover. Move container from spill area. FOR larger spill, dyke far ahead of spill for later disposal. Keep unnecessary people away. Isolate hazard area and deny entry. Ventilate closed space before entering.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Remove contaminated clothing immediately and dispose of safely.
Inhalation	Move the victim to fresh air and keep at rest. Call a physician or poison control center immediately.
Skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. In case of skin irritation, application of oils or lotions containing vitamin E may be considered. If symptoms persist, call a physician.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Warm water may increase the subjective severity of the irritation/paresthesia. This is not a sign of systemic poisoning. Apply soothing eye drops, if needed unaesthetic eye drops. Get medical attention if irritation develops and resists.
Ingestion	Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms	Local:, Skin and eye paranesthesia which may be severe, Usually ransient with resolution within 24 hours, Skin, eye and mucous membrane irritation, Cough, Sneezing Systemic:, Discomfort in the chest, Tachycardia, Hypotension, Nausea, Abdominal pain, Diarrhea, Vomiting, Dizziness, Blurred vision, Headache, Anorexia, Somnolence, Coma, Convulsions, Tremors, Prostration, Airway hyperreaction, Pulmonary edema, Palpitation, Muscular fasciculation, Apathy
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Indication of any immediate medical attention and special treatment needed

Risks	This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
Treatment	Local treatment: Initial treatment: symptomatic. Systemic treatment: Initial treatment: symptomatic. Monitor: respiratory and cardiac functions. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Keep respiratory tract clear. Oxygen or artificial respiration if needed. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. If not effective, phenobarbital may be used. Contraindication: atropine. Contraindication: derivatives of adrenaline. There is no specific antidote. Recovery is spontaneous and without sequelae.

5. FIRE FIGHTING MEASURES

Flash Point: above 35°C

Unknown fire and explosion hazard.

Extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High-volume water jet
Hazchem Code	3Z

Special hazards arising from the substance or mixture

Advice for firefighters

Special protective equipment for fire-fighters

Further information	Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth.
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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions	Keep people away from and upwind of spill/leak. Avoid contact with spilled product or contaminated surfaces. When dealing with a spillage do not eat, drink or smoke.
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Environmental precautions	Do not allow to get into surface water, drains and ground water.
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Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Clean floors and contaminated objects with plenty of water.
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Additional advice	Check also for any local site procedure
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Reference to other sections

Reference to other sections Information regarding safe handling, see section 7. Information regarding personal protective equipment see section 8. Information regarding waste disposal, see section 13

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice. Ensure adequate ventilation.
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Advice on protection against fire and explosion	No special precautions required.
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Hygiene measures	When using, do not eat, drink or smoke. Remove soiled clothing immediately and clean thoroughly before using again. Contaminated work clothing should not be allowed out of the workplace. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Wash hands immediately after work, if necessary take a shower.
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Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in a place accessible by authorized persons only. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight.

Advice on common storage	Protect from freezing. Keep away from food, drink and animal feeding stuffs.
Specific end uses	Refer to the label and/or leaflet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

Respiratory protection is not required under anticipated circumstances of exposure. Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

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Hand protection

Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

Eye protection

Wear goggles (conforming to EN166, Field of Use = 5 orequivalent).

Skin and body protection

Wear standard coveralls and Category 3 Type 6 suit. If there is a risk of significant exposure consider a higher protective type suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Colorless to pale yellow liquid
Odour	Very faint characteristic.
Flash point	above 35°C
Physical State	ready to use liquid form.
Specific Gravity	0.8 at room temperature

Solvent Solubility

Soluble in acetone, benzene, chloroform, ethanol, methanol and organic solvent

10. STABILITY AND REACTIVITY

Stability

Stable under recommendation storage and handling condition at NTP. Avoid direct sunlight. May undergo violent exothermic decomposition above 130 °C. The increase in temperature and pressure may result in the violent rupture of the container.

Incompatibilities

Alkaline condition may cause Hydrolysis.

Hazardous decomposition products: Emits toxic fumes under fire condition.

11. TOXICOLOGICAL INFORMATION

	Deltamethrin	d Allethrin
Toxicity Data	Oral LD 50= male 323.68 mg/kg bw Rat Skin LD 50= >2000mg/kg Rat Inhalation LC 50= 3.09 mg a.i./litre	Oral LD 50= male 2150 mg/kg bw Rat Skin LD 50= Male 2660 mg/kg bw Rabbit Inhalation LC 50= Male > 3875 mg/ cu m
Carcinogen Status	Non-Carcinogen	NA

12. ECOLOGICAL INFORMATION.

Fish: Extremely toxic to fish. Do not apply directly to area where surface water is present. Avoid water ponds and drinking water source.

Highly toxic to aquatic invertebrates

13. DISPOSAL CONSIDERATIONS

Contaminated Packaging: Empty container and product should not be burnt. The used packages will not be left outside to prevent their reuse

Disposal Container: The packages shall be broken and disposed off as per legal regulations, preferably in an approved hazardous waste management facility.

14. TRANSPORT INFORMATION

UN No: : 3351 (Liquid) formulation product. Pyrethroid pesticide, liquid, toxic, flammable flash point 23°C or more.

UN Hazard class : 6.1

Packing Group : III

Caution : Take due care in transportation so as not to spill the liquid.

15. REGULATOR INFORMATION

Approved and registered with CIB – Central insecticide Board under. The insecticide Act 1968 by Central insecticide Board Ministry of Agriculture, Government of India.

Risk/Safety Phrases:

Keep away from children and foodstuffs. If swallowed or symptoms of poisoning occur, call the physician immediately.

16. OTHER INFORMATION

This material should only be used by persons who have been instructed in all safety precautions required and otherwise are familiar with content of data sheet.

Emergency Telephone Number +91-22-6704 5404

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Head Office

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INDIA

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Page 7 of 8