

SHOGUN

ORGANICS LIMITED

Transfluthrin Technical

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY INFORMATION

Product Name	Transfluthrin Technical Grade
Company	Shogun Organics Ltd.
Address	A 106 Kotia Nirman, New Link Road, Andheri(w), Mumbai – 400 058 , India
Website	www.shogunorganics.com
Telephone Number	+91 22 6677 6746
Fax Number	+ 91 22 6677 6847
Use	Technical grade Active Ingredient for household insecticide products

SECTION 2 : HAZARDS IDENTIFICATION

Classification	The WHO hazard classification of Transfluthrin is : Unlikely to present acute hazard in normal use
ADG Classification	Not classified as dangerous

SECTION 3 : INGREDIENTS

Name	Transfluthrin
IUPAC Name	2,3,5,6-tetrafluorobenzyl (1R,3S)-3-(2,2-dichlorovinyl)-2,2- dimethyl cyclopropanecarboxylate
Purity	94% w/w minimum
CAS Number	118712-89-3
Chemical Group	Pyrethroid

SECTION 4: FIRST AID MEASURES

First Aid	If poisoning occurs, immediately contact a doctor and follow the advice given. Show this Material Safety Data Sheet to a doctor.
General	In case of accident or if you feel unwell, seek medical advice immediately
Inhalation	<u>If inhaled</u> , remove from contaminated area to fresh air. If any signs or symptoms occur

	or persist, seek medical advice.
Skin	If on skin remove contaminated clothing and wash skin thoroughly with soap and water. Launder contaminated clothing before re-use. Seek medical advice if irritation develops.
Eye	If in eyes hold eyes open and flood with water for at least 15 minutes and seek medical advice.
Ingestion	If swallowed, do not induce vomiting. Wash mouth with water. Seek medical advice.
Note to Physician	Apply basic aid and decontamination procedures. Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media	Dry chemical powder, carbon dioxide. For Large fires : Water spray or foam
Unsuitable Extinguishing	Water with full waterjet.
Protective Equipment	Ensure respiratory equipment is available. Evacuate immediate area. Wear full protective equipment, including breathing apparatus. See also Section 8.
Fire Fighting	Advise Fire Brigade of nature of hazard. Surrounding containers should be cooled using a fine water spray. All run-off must be contained.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Spills	Stop the source of the spill if it is safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. Wear personal protective equipment as specified in Section 8. Do not allow material to enter sewers or bodies of water.
Small Spills	Apply absorbent inert material such as soil, dry sand or vermiculite to the spill area. Sweep up material when absorption is complete and contain in a refuse vessel for disposal. If necessary, wash the spill area with an alkali detergent and water and absorb and contain as above.
Large Spills	Place leaking containers into salvage drums. Apply absorbent inert material such as soil, dry sand or vermiculite to the spill area. Form a barricade around spill and in front of drains or waterways in spill vicinity, using soil

	or other non reactive material. Sweep up material and contain in a refuse vessel for disposal.
Disposal	Contaminated material must be disposed of in accordance with all State and/or Local regulations.

SECTION 7: HANDLING AND STORAGE

Handling	Keep out of reach of children, unauthorised persons and animals. After handling and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. For personal protection see Section 8.
Storage Requirements	Store in the closed, original container in a dry, cool, well ventilated area, out of direct sunlight. Do not store near food, feedstuffs, fertiliser or seed. Store at ambient temperatures.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls	No engineering control measures are allocated to the use of this product, however always use in a well ventilated area.
Exposure Limits	No exposure limits have been established for this material.
<i>Personal Protection :</i>	
Respiratory	Use only in well ventilated areas.
Hand	Wear protective gloves
Eye	Avoid contact with eyes. Eye contact can be avoided by wearing protective eyewear.
Skin and Body	Avoid contact with skin or clothing. Skin contact should be minimised by wearing protective clothing including gloves, long sleeved shirt, long pants and chemical resistant boots.
Other Information	Laundry clothes before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid to semi solid mass
Colour	Pale to yellow
Odour	NA
Boiling point / range	242°C
Melting point / range	35°C
Flammability	NA

Explosive Properties	NA
Explosion Limits	NA
Oxidising Properties	NA
Vapour Pressure	9 x 10 ⁻⁴ Pa at 20°C
Density	1.507 g/cm ³
Solubility in water	0.057 mg/l at 20°C
Solubility in other solvents	Soluble (in most organic solvents)

SECTION 10: STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions. (See Section 7)
Conditions to avoid	Avoid direct sunlight.
Materials to avoid	Alkaline materials and highly acidic media
Hazardous Decomposition	Emits toxic fumes under fire conditions

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	
Oral	LD ₅₀ : > 5000 mg/kg bw (Rat)
Dermal	LD ₅₀ : >5000 mg/kg bw (Rabbit)
Inhalation	LC ₅₀ : >513 mg/m ³ (Rat)

Irritation	
Skin	Not irritant (rabbit)
Eye	Not irritant (rabbit)
Sensitisation	Non-sensitising (guinea pig)

SECTION 12: ECOLOGICAL INFORMATION

Do not contaminate streams, rivers or waterways with the chemical or used containers.

Ecotoxicity	
Fish	Highly toxic to fish.
Daphnia	Highly toxic to aquatic invertebrates.

SECTION 13: DISPOSAL CONSIDERATIONS

Product	This material must be disposed of as a hazardous waste. Disposal should be in accordance with local, national or state regulations.
Contaminated Packaging	Puncture, or shred and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose, clear of waterways,

	desirable vegetation and tree roots. Empty containers and product should NOT be burnt.
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SECTION 14: TRANSPORT INFORMATION

<i>Road and Rail Transport</i>	
UN Number	3352
Class	6.1
Proper Shipping Name	Pyrethroid pesticide

<i>Sea and Air Transport</i>	
UN Number	3352
Class	6.1
Proper Shipping Name	Pyrethroid pesticide

SECTION 15: REGULATORY INFORMATION

Product is registered with the Central Insecticide Board Registration Committee , Ministry of Agriculture , Government of India

SECTION 16: OTHER INFORMATION

Date	22 June 2011
Abbreviations	NA – Not Applicable / Not Available

THE INFORMATION IS TO OUR BEST PRESENT KNOWLEDGE CORRECT AND COMPLETE AND IS GIVEN IN GOOD FAITH BUT WITHOUT WARRANTY. IT REMAINS THE USER'S OWN RESPONSIBILITY TO MAKE SURE THAT THE INFORMATION IS APPROPRIATE AND COMPLETE FOR THE SPECIAL USE OF THIS PRODUCT. USERS ARE FURTHER REMINDED OF THE POSSIBLE RISKS OF USING THIS PRODUCT FOR PURPOSES OTHER THAN THOSE FOR WHICH IT WAS INTENDED. THE COMPANY DOES NOT GUARANTEE NOR IS RESPONSIBLE REGARDING THE VARIOUS LOCAL LAWS AND PATENTS IN CONNECTION WITH USE OF THIS PRODUCT