



Prallethrin Technical

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY INFORMATION

Indonesia Regional Holder	PT. TSTI
Address	Rose Garden Blok RRG 2 No. 83, Grand Galaxy City, Jakasetia, Kota Bekasi.
Website	takbir-sukma.com
Telp Number	+62 21 8274 9477
Product Name	Prallethrin Technical
Manufacture	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	Moderately Hazardous . Harmful if swallowed and toxic by inhalation.
ADG Classification Classified as Dangerous	Classified as Dangerous

SECTION 3 : INGREDIENTS

Name	PRALLETHRIN / ETOC
IUPAC Name	(S)-2-methyl-4-oxo-3-prop-2-ynylcyclopent-2-enyl (1R)-cis,trans-2,2-dimethyl -3-(2-methylprop-1-enyl)cyclopropanecarboxylate
Purity	90% w/w minimum
CAS Number	23031-36-9

SECTION 4: FIRST AID MEASURES

Symptoms and Effects	There can be slight redness or whiteness of the skin in the area of exposure. Irritation may occur at the site of contact. High absorption through the skin may be fatal. Can cause pain with eye contact. The eyes may water. If ingested, can cause soreness and redness of the mouth and throat. There may be vomiting, convulsions or loss of consciousness. With inhalation, there may be shortness of breath with a burning sensation in the throat. Absorption through the lungs can occur causing symptoms similar to those of ingestion.
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	If inhaled, 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

Fire and Explosion Hazards	Flash point: 139°C Autoignition Temperature: 354 °C
Extinguishing Media	Dry chemical powder, carbon dioxide. For Large fires : Water fog, spray or foam
Unsuitable Extinguishing	Water with full waterjet.
Hazardous Decomposition / Combustion Products	This product is combustible. May emit toxic and irritating fumes under fire conditions
Protective Equipment	Ensure respiratory equipment is available. Evacuate immediate area. Wear full protective equipment, including breathing apparatus. See 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 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. Contact emergency services as required.

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, unauthorized 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.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls	Provide adequate ventilation. Keep container tightly closed.
Exposure Limits	No exposure limits have been established for this material.
<i>Personal Protection :</i>	
Respiratory	Use only in well ventilated areas. Wear a mask with organic vapour cartridge.
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	Launder clothes before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous liquid
Colour	Yellow to brown
Odour	Substantially odourless
Boiling point / range	313°C
Melting point / range	Liquid at room temperature
Flammability	NA
Explosive Properties	NA
Explosion Limits	NA
Oxidising Properties	NA
Vapour Pressure	1.0 x 10.4 mmHg at 30C
Density	1.03 g/mL (20C)
Solubility in water	almost insoluble 0.00803e1 at 25°C at pH5.5-5.6
Solubility in other solvents	Soluble (in most organic solvents)
Partition coefficient n-octanol / water	log POW = 4.49 at 25°C and pH 5.6-5.9

SECTION 10: STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions. (See Section 7)
Conditions to avoid	Avoid direct sunlight, exposure to flames, heat and high temperatures.
Materials to avoid	Oxidizing and Alkaline materials.
Hazardous Decomposition	Emits toxic fumes under fire conditions (See also Section 5).

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity	
Oral	LDS (male) 640 mg/kg bw (Rat)
Dermal	LDS (male) >5000 mg/kg bw (Rat)
Inhalation	LC.50 (male) 855 (Rat)

Irritation	
Skin	Not irritant (rabbit)
Eye	Minimal 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.
Environment	
Mobility	Readily absorbed into soil.
Persistence and degradability	Degrades by sunlight in soil with a half life of approx. 25 days. Degrades by sunlight in water with a half life of 13.6 hours.

SECTION 13: DISPOSAL CONSIDERATION4

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.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport	
UN Number	3352
Class	6.1
Hazchem Code	2X
Proper Shipping Name	Pyrethroid pesticide liquid, toxic
Packaging Group	III
Poisons Schedule Number	6
Sea and Air Transport	
UN Number	3352
Class	6.1
Proper Shipping Name	Pyrethroid pesticide liquid, toxic
Packaging Group	III
Poisons Schedule Number	6

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