

# SHOGUN

## ORGANICS LIMITED

### d-Allethrin Technical ( Allethrin Technical )

#### MATERIAL SAFETY DATA SHEET

##### **SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND COMPANY INFORMATION**

Product Name	d-Allethrin 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	Hazardous, Harmful by inhalation and if swallowed.
ADG Classification	Not classified as dangerous

##### **SECTION 3 : INGREDIENTS**

Name	d-allethrin
IUPAC Name	(RS)-3-allyl-2-methyl-4-oxocyclopent-2-enyl (1R)-cis, transchrysanthemate
Purity	90% w/w minimum
CAS Number	584-79-2 / ( EU : 231937-89-6 )
Chemical Group	Pyrethroid

##### **SECTION 4: FIRST AID MEASURES**

Symptoms and Effects	May cause a transient itching and/or burning sensation in exposed human skin. Extraordinary absorbed doses may rarely cause hyper-excitability, uncoordinated movements, salivation, nausea or vomiting and diarrhoea.
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
<b>Inhalation</b>	If <u>inhaled</u> , remove from contaminated area to fresh air. If any signs or symptoms occur or persist, seek medical advice.
<b>Skin</b>	If <u>on skin</u> remove contaminated clothing and wash skin thoroughly with soap and water. Launder contaminated clothing before re-use. Seek medical advice if irritation develops.
<b>Eye</b>	If <u>in eyes</u> hold eyes open and flood with water for at least 15 minutes and seek medical advice.
<b>Ingestion</b>	If <u>swallowed</u> , do not induce vomiting. Wash mouth with water. Seek medical advice.
<b>Note to Physician</b>	Apply basic aid and decontamination procedures. Treat symptomatically.

#### **SECTION 5: FIRE FIGHTING MEASURES**

<b>Fire and Explosion Hazards</b>	Flash point: 87 degrees C
<b>Extinguishing Media</b>	Dry chemical powder, carbon dioxide. For Large fires : Water spray or foam
<b>Unsuitable Extinguishing</b>	Water with full waterjet.
<b>Hazardous Decomposition / Combustion Products</b>	This product is combustible. May emit toxic and irritating fumes under fire conditions (carbon monoxide and carbon dioxide).
<b>Protective Equipment</b>	Ensure respiratory equipment is available. Evacuate immediate area. Wear full protective equipment, including breathing apparatus. See also Section 8.
<b>Fire Fighting</b>	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**

<b>Spills</b>	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.
<b>Small Spills</b>	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.

<b>Large Spills</b>	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.
<b>Disposal</b>	Contaminated material must be disposed of in accordance with all State and/or Local regulations.

#### **SECTION 7: HANDLING AND STORAGE**

<b>Handling</b>	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.
<b>Storage Requirements</b>	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**

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

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Liquid
<b>Colour</b>	Yellow to brown

<b>Odour</b>	Faint Characteristic
<b>Boiling point / range</b>	281.5 C at 760 mmHg
<b>Flammability</b>	NA
<b>Explosive Properties</b>	NA
<b>Vapour Pressure</b>	0.16 mPa
<b>Specific Gravity</b>	1.01
<b>Solubility in water</b>	5 ppm at 25 deg C
<b>Solubility in other solvents</b>	Soluble in most organic solvents and mineral oils.
<b>pH value</b>	NA
<b>Partition coefficient n-octanol / water</b>	Log P <sub>ow</sub> = 4.95 (25°C)

#### **SECTION 10: STABILITY AND REACTIVITY**

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

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Acute Toxicity</b>	
<b>Oral</b>	LD <sub>50</sub> = (male) 2150 mg/kg bw (Rat)
<b>Dermal</b>	LD <sub>50</sub> = (male) 2660 mg/kg bw (Rabbit)
<b>Inhalation</b>	LC <sub>50</sub> = (male) >3875 mg/m <sup>3</sup>

<b>Irritation</b>	
<b>Skin</b>	Not irritant (rabbit)
<b>Eye</b>	Slight irritant (rabbit)
<b>Sensitisation</b>	Non-sensitising (guinea pig)

#### **SECTION 12: ECOLOGICAL INFORMATION**

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

<b>Ecotoxicity</b>	
<b>Fish</b>	Highly toxic to fish.
<b>Daphnia</b>	Highly toxic to aquatic invertebrates.

<b>Mutagenicity profile</b>	
<b>Bacteria</b>	Not mutagenic
<b>Yeast</b>	Not mutagenic

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

<b>Product</b>	This material must be disposed of as a hazardous waste. Disposal should be in accordance with local, national or state regulations.
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<b>Contaminated Packaging</b>	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**

<b><i>Road and Rail Transport</i></b>	
<b>UN Number</b>	3352
<b>Class</b>	6.1
<b>Hazchem Code</b>	2X
<b>Proper Shipping Name</b>	Pyrethroid pesticide liquid, toxic
<b>Packaging Group</b>	III
<b>Poisons Schedule Number</b>	6

<b><i>Sea and Air Transport</i></b>	
<b>UN Number</b>	3352
<b>Class</b>	6.1
<b>Proper Shipping Name</b>	Pyrethroid pesticide liquid, toxic
<b>Packaging Group</b>	III
<b>Poisons Schedule Number</b>	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**

<b>Date</b>	22 June 2011
<b>Abbreviations</b>	NA – Not Applicable / Not Available

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