

**1: IDENTIFICATION**

<b>Chemical Name</b>	2-Methyl-3-phenyl phenyl) methyl (1S, 3S)-3-[(Z)-2-chloro-3, 3, 3-trifluoroprop-1 enyl] - 2, 2-dimethylcyclopropane-1-carboxylate		
<b>Synonyms</b>	Bifenthrin 10% EC	<b>Trade Name BINOY</b>	
<b>Uses</b>	Insecticide	<b>Molecular Formula</b> C <sub>23</sub> H <sub>22</sub> ClF <sub>3</sub> O <sub>2</sub>	
<b>Manufacturer/Supplier</b>	Ulink AgriTech Pvt. Ltd. Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra		
<b>Emergency Contact</b>	9503095030	<b>E-mail</b>	<a href="mailto:info@agrostar.in">info@agrostar.in</a>

**2: COMPOSITION/INFORMATION OF INGREDIENTS**

Chemical Name	CAS #	Percent or Content (w/w)
Bifenthrin	82657-04-3	10.00%
Other Ingredients	-	Q.S

**3: HAZARD IDENTIFICATION**

<b>Physical/ Chemical Hazard</b>	Keep out of reach of children;
<b>Health Hazard</b>	May cause sensitization by skin contact. Harmful if swallowed
<b>Environmental Hazard</b>	Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

**4: FIRST AID MEASURES**

**General:** Have the product container, label or safety data sheet while seeking medical attention, a poison control center or physician, or going for treatment.

**Inhalation:** Move patients to fresh air. Keep the patients warm and at rest. If person is not breathing then give artificial respiration, preferably mouth-to-mouth if possible Allow patients to rest. Immediately seek medical attention.

**Ingestion:** Rinse mouth with water and give plenty of water to drink. Do not induce vomiting unless told by doctor. Do not give anything by mouth to an unconscious person. Seek medical attention immediately and show this container or label.

**Skin Contact:** In case of contact with product, wash immediately skin area with plenty of water and soap. Speed in removing material from skin is extremely important. Remove and isolate contaminated clothing and shoes. Call medical attention.

**Eye Contact:** Rinse immediately with plenty of water for several minutes. After 5 minutes remove contact lenses if present and continue rinsing with plenty of water. Continue to rinse with eyelid wide open for at least 15-20 minutes. Seek medical attention if irritation develops.

**Note to Physician:** No specific antidote, treat symptomatically.

**5: FIRE FIGHTING MEASURES**

**Extinguishing Media:** Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide

**Unsuitable Extinguishing Media:** Solid water stream as it may scatter or spread the fire

**Specific Hazards:** Can burn in fire. Irritating and toxic gases may produce irritating and toxic gases due to thermal decomposition or combustion. Exposure to vapours or smoke may be a hazard to health.

**Hazardous Thermal (de)composition:** Toxic and irritating fumes will release on combustion due to thermal decomposition or combustion.

**Special Procedures:** Evacuate area and fight fire upwind from a safe distance. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff. Minimize use of water to prevent environmental contamination. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Do not discharge extinguishing water into the drain or water bodies.

**Protection of Fire Fighters:** Do not breathe a fumes. Wear a self contained breathing apparatus. Wear suitable protective gloves and eye/face protection.

**6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Ventilate spillage area. Avoid breathing fume. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from spill/ fumes.

**Environmental Precaution:** Do not allow runoff to enter drains and public waters. Notify the authorities if product enters.

**Methods for Cleaning up:** Clean up any spills as soon as possible mechanically and collect in sealed containers for disposal. Clean contaminated floors and objects thoroughly with water and detergents. Dispose of in accordance with local regulations. If significant amount of product enters into drain, notify the local authorities.

**7: HANDLING & STORAGE**

**Handling:** Do not smoke, drink, or eat during handling. Wash hands using liquid detergent. Wear protective clothing to avoid contact and/or inhalation with the product. Good personal hygiene procedures must be practiced.

**Specific Conditions:** Good local exhaust ventilation.

**Storage:** Store in dry, cool, well-ventilated area. Keep in original container and tightly closed when not in use. Keep product away from seeds, fertilizer, foods and animal feeds. Keep out of reach of the children.

## 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering Measures:** Ensure area is well-ventilated especially in confined area. Handle in accordance with good industrial hygiene and safety practice.

**General Protection:** Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

**Personal Protection:** Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

**Respiratory Protection:** Always use NIOSH/MSHA approved respiratory protection equipment with a universal filter type including particle filter.

**Skin Protection:** Wear suitable protective clothing, including boots, gloves, lab coat, apron or cover all, as appropriate to avoid skin contact. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

**Hand Protection:** Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC) or Viton.

**Eye Protection:** Safety goggles, chemical splash goggles or face shield for eyes protection should be used. Safety showers and eyewash should be easily available.

**Others:** Wash clothing before reusing.

## 9: PHYSICAL/CHEMICAL PROPERTIES

**Appearance:** Liquid

**Emulsion Stability [ml]:** 2.0

**Flammability:** Flammable

**Physical State:** Liquid

**Colour:** Pale yellow to brown

**Specific Gravity:** 0.90-0.95

**pH:** No data available

**Flash Point [°C]:** > 24

## 10: STABILITY & REACTIVITY

**Stability:** Stable under normal circumstances.

**Conditions to Avoid:** Heat, flames and sparks

**Hazardous Decomp. Products:** Irritating and toxic gases may release due to thermal decomposition or combustion.

**Material to Avoid:** None known

## 11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : 175

Rat inhalation LC50 [mg/l/4h] : 1.66

Skin irritation (rabbit): Mild-irritant

Dermal (rat) LD50 [mg/kg]: ≥ 5000

Skin Sensitization (Guinea Pig): Skin-Sensitizer

Eye irritation (rabbit): Moderate-irritant

## 12: ECOLOGICAL INFORMATION

### Ecotoxicity

Algae ErC50[mg/L] : ≥ 8

TLM fish 1 - 0.00015 mg/l (rainbow trout)

TLM fish 2 - 0.00035 mg/l (bluegill sunfish)

TLM other aquatic organisms -1 0.00016 mg/l (Daphnia)

**Bio-accumulation Potential:** No data available.

**Persistence, Degradability and Mobility in Soil:** No data available

## 13: DISPOSAL CONSIDERATION

**Waste-disposal Procedures:** Dispose of this product only according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations

**Contaminated Packaging:** Empty remaining contents and the rinse containers thrice before disposal. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers unless they are specifically designed to be refilled

## 14: TRANSPORT INFORMATION

**UN No.** 3351 **Proper Shipping Name:** Organophosphorus pesticide liquid, toxic, flammable (Bifenthrin 10% EC)

**Land Transport (ADR/RID):** Class-6.1,3, Packing group-III

**Sea Transport (IMO/IMDG):** Class-6.1,3, Packing group-III, Marine Pollutant-Yes

**Air Transport (IATA/ICAO):** Class-6.1,3, Packing group-III

## 15: REGULATORY INFORMATION

**Hazard Symbol:** Xn: Harmful; N: Dangerous for the environment

**Risk Phrases:** R10, R20,R25, R36, R43, R50/53, R51/53, R57

**Safety Phrases:** S2,S24, S28 S36/37, S60

## 16: OTHER INFORMATION

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