



**Bharat**  
**RASAYAN LIMITED**

Regd. Off. : 1501, Vikram Tower, Rajendra Place,  
New Delhi-110008, (India)  
Phones: 91-11-41538383 (8 Lines) Fax: 41538600, 25727781  
E-mail: info@bharatgroup.co.in  
Website: www.bharatgroup.co.in

## Material Safety Data Sheet

### 1 Identification of substance:

- **Product details:**

- **Product name:** Bifenthrin Technical

- **Manufacturer/Supplier:**

Bharat Rasayan Limited, 1501, Vikram Tower, Rajendra Place, New Delhi - 110 008, India; Phone: +91 - 11 - 43661120,1104; Fax: +91 - 11 - 43661100

### 2 Composition/Data on components:

- **Chemical characterization:**

- **Description: (CAS#)**

2-Methyl-3-phenylphenyl)methyl (1S,3S)-3-[(Z)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate 2-Methyl-3-phenylphenyl)methyl (1S,3S)-3-[(Z)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate

- (CAS# 82657-04-3) 98%
- **Identification number(s):**
- RTECS No.
- UN No. 3349
- EC Number: 83520-5

### 3 Hazards identification

**Eye:**

May cause eye irritation, redness, pain

**Skin**

May cause eye irritation, redness, pain

**Ingestion**

May cause abdominal pain and cough



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**Inhalation:**

May cause burning sensation, cough, shortness of breathing and sore throat.

**4 First aid measures**

- **After inhalation**

Remove from exposure and move to fresh air. If required, provide artificial respiration.  
Seek immediate medical advice.

- **After skin contact**

Immediately wash with plenty of water at least 15 minutes while removing contaminated clothing and shoes.  
Seek immediate medical advice.

- **After eye contact**

Rinse opened eye under running water for at least 15 min immediately. Then consult a doctor immediately.

**After swallowing**

Seek immediate medical advice.

- **5 Fire fighting measures**

- **Suitable extinguishing agents**

Use dry chemical, foam or Carbon dioxide extinguishing media.

**Protective equipment:**

Wear self-contained respirator.

Wear fully protective cloths.

**6 Accidental release measures**

- **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation

- **Measures for environmental protection:**

Do not allow material to be released to the environment without proper governmental permits.

- **Measures for cleaning/collecting:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Ensure adequate ventilation.



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## **7 Handling and storage**

- **Handling**
- **Information for safe handling:**  
Keep container tightly sealed.
- Store in cool, dry place in tightly closed containers.
- Ensure good ventilation at the workplace.
- **Information about protection against explosions and fires:**  
Keep ignition sources away.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**  
No special requirements.
- **Information about storage in one common storage facility:**
- Store away from oxidizing agents.

**Further information about storage conditions:**  
Keep container tightly sealed.

## **8 Exposure controls and personal protection**

- **Additional information about design of technical systems:**  
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
- **Components with limit values that require monitoring at the workplace:**
- **Additional information:** No data
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Remove all soiled and contaminated clothing immediately.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
Use suitable respirator when high concentrations are present.
- **Protection of hands:**  
Use protective gloves



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- Check protective gloves prior to each use for their proper condition.
- **Material of gloves**  
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.
- **Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

## **9 Physical and chemical properties:**

- **General Information**

- **Form:** Crystalline powder or waxy Solid
- **Color:** white to off-white (99%)

**Odor:** odourless

- **Melting point/Melting range:** 68-71°C
- **Sublimation temperature / start:** Not determined
- **Vapour pressure, Pa at 20°C** : 1.81x10<sup>-7</sup> mm hg
- **Ignition temperature:** Not determined
- **Decomposition temperature:** about 275°C
- **Danger of explosion:** Not known
- **Relative Density(water=1):** 1.210
- **Solubility in / Miscibility with** Acetone, Toluene
- **Water:** Insoluble in water



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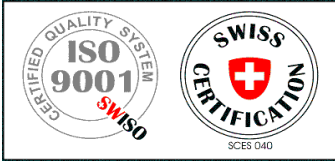
## **10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:**  
Decomposition will not occur if used and stored according to specifications.
  - **Hazardous polymerisation :** will not occur
  - **Materials to be avoided:** not known.
  - **Dangerous products of decomposition:**
- 
- Can decompose at high temperature forming toxic gases.

## **11 Toxicological information**

- **Acute toxicity:**
- Acute oral LD50 for mallard ducks > 3950 mg/kg body weight
- **Sub acute to chronic toxicity:**  
Other than potential irritation (see above), no information on illness or injury to humans from acute or chronic exposure to this product is available.
- **Carcinogenicity :**
- Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
- See actual entry in RTECS for complete information.

## **12 Ecological information:**



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- **General notes:**

Do not allow material to be released to the environment without proper governmental permits

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### **13 Disposal considerations :**

- **Recommendation** Consult state, local or national regulations to ensure proper disposal.
- **Uncleaned packaging:**
- **Recommendation:**  
Disposal must be made according to official regulations.

### **14 Transport information**

Not a hazardous material for transportation.

Proper Shipping name : Environmentally Hazardous Substance pyrethroid pesticide, (Bifenthrin tech)

- **IATA:**
- No information available



- **IMO:**  
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- **Land transport ADR/RIV**
- No information available
- UN Hazard Class : 6.1
- Un Pack group : III
- **Maritime transport IMDG:**
- No information available

## 15 Regulations

EPCRA SARA title Classification

Section 311/312 Hazard Classes : Acute Health Hazard  
Chronic Health Hazard

European labeling in accordance with EC Directives.

- **Product related hazard information:**
- **Hazard symbols:** T+
- **N Symbol**
- **R: 21-25-26-50/53**



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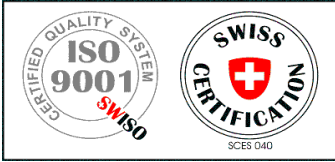
**16 Other information:**  
E-mail: [info@bharatgroup.co.in](mailto:info@bharatgroup.co.in)  
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Prepared by : Bharat Rasayan Limited Safety Division

Date of Preparation: Aug 21, 2017





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