



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room 1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: Oct. 1, 2024

MATERIAL SAFETY DATA SHEET OF

BIFENTHRIN 2.5% EC

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Supplier: Shanghai Bosman Industrial Co., Ltd.

Street address: Room 1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

FAX: +86 21 63065878

TEL: +86 21 63065878

Product name: Bifenthrin 2.5% EC

2. COMPOSITION/INFORMATION ON INGREDIENTS

Formulation Type: Emusifiable concentrate (EC)

Chemical name: (2-methyl[1,1'-biphenyl]-3-yl)methyl 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethylcyclopropanecarboxylate

Molecular Formula: $C_{23}H_{22}ClF_3O_2$

Molecular Weight: 422.9

Other ingredients determined not to be hazardous

INGREDIENT	CAS NO	PROPORTION
Bifenthrin	82657-04-3	2.5% min
Inerts	Not available	90% max

3. HAZARDS IDENTIFICATION

Human health hazards : Harmful if swallowed. Toxic by inhalation. Irritating to eyes and skin.

Environmental hazard : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

First aid measures

Inhalation : Remove victim to fresh air. Keep victim warm and at rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

Skin contact : Consult a doctor in the event of any complaints. Remove affected clothing and wash all exposed skin area with soap and water, followed by warm water rinse.

Eye contact : Wash off with plenty of water . Consult an eye specialist.

Ingestion : Do not induce vomiting. Wash out mouth with plenty of water. Consult a doctor in the event of



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any complaints.

Undesirable human health effects : No specific effects and/or symptoms have been reported or known .

Note to physician : There is no specific antidote. Treat symptomatically and give supportive therapy.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media : Not flammable . In case of fire, use : water spray , water fog , foam .

Specific hazards : Carbon monoxide , carbon dioxide , hydrogen chloride , HF .

Protection against fire : Wear suitable protective clothing Self-contained breathing apparatus. Move containers away from fire without risk .

Special procedures : Fight fires from a protected location . Dike fire control water for later disposal.

Do not discharge into the environment

6. ACCIDENT RELEASE MEASURES

For emergency: Use appropriate protection (see section 8).

Environmental precautions : Dispose of this material and its container at hazardous or special waste collection point If the product has contaminated surface water, inform the appropriate authorities.

Clean up methods : Use appropriate container to avoid environmental contamination. Collect spilled material. Absorb in sand or other inert material .

7. HANDLING AND STORAGE

Handling: Toxic if swallowed. Avoid contact with eyes and skin, and inhalation of dust and vapour. Use with adequate ventilation. Wash hands before eating, drinking, hewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage: Stable for up to 2 years when stored under dark, dry warehouse conditions. The product must be kept under lock and key. Keep out of reach of unauthorised persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

No occupational exposure limits have been established . Wash hands thoroughly after handling. Wash clothing before re-using.

Respiratory protection : During spraying wear suitable respiratory equipment.



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Hand protection : Wear suitable gloves.

Skin protection : Wear protective clothing .

Eye protection : Chemical goggles or safety glasses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid

Odour: Faint odour -paint

Boiling point : 100 °C

Flash point : NA

Density : NA

10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.

Hazardous decomposition products : Carbon dioxide , carbon monoxide , hydrogen chloride , HF , smoke .

Materials to avoid : Avoid contact with : oxidizing agents .

Conditions to avoid : Excessive heat and fire .

11. TOXICOLOGICAL INFORMATION

For Bifenthrin TC

Acute toxicity:

Rat oral LD50 : 630 mg/kg (female)

Dermal, Rat LD50 : >2000mg/kg

Rat inhalation LC50 [mg/l/4h] : > 2.06 (male), > 0.55 (female)

Dermal irritation (rabbit) : Slight irritant

Eyes irritation (rabbit) : Mildly irritating

Sensitization : Guinea pig maximization test: Non sensitizer

Carcinogenicity : Not carcinogenic

Toxic for reproduction : Fertility : Not teratogenic in animal experiments

12. ECOLOGICAL INFORMATION

May be harmful if swallowed, inhaled or absorbed through skin.

Causes moderate eye irritation.

Avoid breathing vapors.

Avoid contact with eyes, skin or clothing.



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Keep out of reach of children

Birds Acute oral LD50 for bobwhite quail >1800, mallard ducks >2150 mg/kg. Dietary LC50 (8 d) for bobwhite quail 4450, mallard ducks 1280 mg/kg diet.

Fish LC50 (96 h) for bluegill sunfish 0.000269, rainbow trout 0.00015 mg/l.

Daphnia LC50 (48 h) 0.00016 mg/l. Low solubility in water and high affinity for soil contribute to produce little impact in aquatic systems under field conditions.

Algae EC50 and ErC50 >8 mg/l.

Other aquatic spp. NOEC (28 d) for *Chironomus riparius* 0.00032 mg/l.

Bees LD50 (oral) 0.1 µg/bee; (contact) 0.01462 µg/bee.

Worms LC50 >16 mg/kg dry soil.

Other beneficial spp. LR50 for *Aphidius rhopalosiphi* 7.5 g/ha, for *Chrysoperla carnea* 5.1 g/ha.

13. DISPOSAL CONSIDERATION

Pesticide disposal: Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product that cannot be reused or reprocessed should be disposed of in a landfill approved for pesticide disposal. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Package product wastes: Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed. Empty the container of excess product into the container of the applicator. Destroy the emptied containers by perforation and flattening. Bury in an approved, designated landfill. Do not re-use the empty container for any other purpose. Comply with any local legislation applying to disposal.

14. TRANSPORT INFORMATION

UN Number: 3352

UN Proper shipping name: PYRETHROID PESTICIDE, LIQUID, TOXIC (contains Bifenthrin)

Transport hazard class: 6.1

Packing group: III

15. REGULATORY INFORMATION

Follow all local and international laws and regulations.

16. OTHER INFORMATION

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This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact this company.

-- END OF MSDS --