

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL NATURE

PRODUCT : Bifenthrin 2.5% EC (**SWAL HOME TC**) – Insecticide /Termiticide

CHEMICAL NAME: 2-methylbiphenyl-3-ymethyl (Z)-(1RS)-cis-3-(2chloro-3, 3, 3-trifluoroprop-1-enyl)-2,2dimethylcyclopropanecarboxylate.

CHEMICAL FAMILY: Pyrethroid

CHEMICAL FORMULA: C₂₃H₂₂ClF₃O₂

MOLECULAR WEIGHT: 422.9

SECTION 2 – COMPOSITION, INFORMATION OF INGREDIENTS COMPONENT

	Percent Purity	CAS NO.
Bifenthrin A.I.	2.5%	82657-04-3
Other Ingredients	97.5 %	

SECTION 3 – HAZARDS IDENTIFICATION SUMMARY

Emergency Overview

Yellowish liquid with mild characteristic odor.

Thermal decomposition and burning may form toxic by-products.

For larger exposures or fire, wear personal protective equipments.

Highly toxic to fish and aquatic organisms.

Keep away from drains and water sources.

Potential Health Hazards:

Effects from over exposure may result from swallowing, inhaling or coming in to contact the skin or eyes. Symptoms of over exposure include bleeding from the nose, tremors and convulsions. Contact with skin occasionally produces skin sensations such as rashes, numbing, burning or tingling. These skin sensations are reversible and usually subside with in 12 hours.

SECTION 4 – FIRST AID MEASURES

IF INHALED: Remove person from exposure area to fresh air, If not breathing difficulty or discomfort occurs or persists get medical attention.

IF ON SKIN: Wash skin with plenty of soap and water.

IF SWALLOWED : Drink 1 or 2 glasses water and induce vomiting by touching the back of throat with a finger or by giving syrup of ipecac. Immediately contact physician, Poison Control or an emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person.

IF IN EYES: Wash eyes with plenty of water. If irritation continues, call a doctor.

ANTIDOTE: Give symptomatic treatment as per symptoms and cause.

SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT - >100 0C (TCC)

EXTINGUISHING MEDIA: Foam, CO2 or dry chemical. Soft stream of water fog only if needed.

FIRE AND EXPLOSION HAZARD: Slightly combustible. Material may not support combustion at elevated temperatures.

FIRE FIGHTING EQUIPMENT: Isolate fire area. Evacuate down wind. Wear self-contained breathing apparatus pressure and protective gears.. Do not smoke gasses or vapor generated.

HAZARDOUS COMBUSTION PRODUCTS: Carbon dioxide, Carbon Monoxide, Chlorine, Fluorine, Hydrogen chloride and Hydrogen fluoride.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Vacuum or sweep up material and place in properly labeled disposal container. Dike to confine spill and absorb with non – combustible absorbent like clay, sand or soil. Vacuum shovel or pump waste in to drum and label contents for disposal. Large spills may be neutralized with dilute solutions of soda ash or with appropriate alcohol. After removal, flush contaminated area thoroughly with water. Do not allow any material to run off in soil, drainage systems or bodies of water. Notify and consult with proper regulatory authorities.

SECTION 7 – HANDLING AND STORAGE

KEEP OUT OF REACH OF CHILDREN

GENERAL PROCEDURES: Store in a cool dry, well ventilated place in original container and protect from sunlight. Keep away from food, animal feed, other pesticides fertilizers and drinking water.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

ENGINEERING CONTROL: Used local exhaust ventilation at all processes locations where vapor or mist may be emitted. Ventilate all transport vehicles prior to unloading.

PERSONAL PROTECTIVE EQUIPMENT:

EYE AND FACE PROTECTION - Safety goggles or face shield.

CLOTHING – Long sleeved shirt and long pants, shoes plus socks, chemical resistant headgear for overhead exposures.

GLOVES – Wear waterproof gloves.

USER SAFETY RECOMMENDATIONS – Wash hands before eating, drinking, and chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change in to clean clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES (Technical)

PHYSICAL DESCRIPTION: White crystalline powder.

ODOR: Mild characteristic odor

CHEMICAL FORMULA: C₂₃H₂₂ClF₂O₂

MOLECULAR WEIGHT: 422.9

MELTING POINT: 68 –71 °C

DENSITY: 0.567 g/ml

VAPOR PRESSURE: N/A

WATER SOLUBILITY: 0.15 mg/l (20° C)

SECTION 10 – STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat and fire.

HAZARDOUS POLYMERISATION: Product will not undergo polymerization.

SECTION 11 – TOXICOLOGICAL INFORMATION (Technical)

ACUTE TOXICITY: Oral LD ₅₀ (rat)	– 74.90mg/kg body weight
Dermal LD ₅₀ (rat)	- >2000mg/kg body weight
Inhalation LC ₅₀ (rat)	- > 3.191 mg/l of air
Eye Irritation (rabbit)	– Irritating
Skin Irritation (rabbit)	– Slight irritant
Sensitization (guinea pig)	– Weak-sensitizer

SECTION 12 – ECOLOGICAL INFORMATION

Environmental Summary –

This pesticide is slightly toxic to waterfowl and upland game birds.

Bifenthrin is highly toxic to fish.

Bifenthrin is also toxic to bees.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste – Dispose of in accordance with applicable Federal, State, local laws and regulations.

Container – Empty the container with equipment. Do not re-use the container prior to triple rinsing and cleaning..
Dispose of empty containers in a sanitary landfill or incineration so as to avoid environmental or water pollution.

SECTION 14 – TRANSPORT INFORMATION

UN No. - 3349

Packaging Class and Group – 6.1 and III

Label – Toxic M.P.

SECTION 15 - MANUFACTURE'S / SUPPLIER'S DATA

Name of Firm: SWAL CORPORATION LIMITED

Mailing: UNIPHOS HOUSE, MADHU PARK ,
KHAR (WEST), MUMBAI-400 52.
MAHARASHTRA (INDIA)

Manufacturing Site

UNITED PHOSPHORUS
LIMITED,
117, GIDC,
Ankaleshwar Gujarat,- 393002
Tel. 0091 - 02646 – 50336
Fax 0091- 02646 –50297

Tel. 0091-22 - 2640 1111

Fax 0091-22- 2640 1010

Local Bodies Involved

Collector of Ankaleshwar
Gujarat, India

SWAL CORPORATION LIMITED

BIFENTHRIN 2.5%EC

SECTION 16 - DISCLAIMER

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Date: 14/05/2006