

1: IDENTIFICATION

Chemical Name	Tolfenpyrad: 4-chloro-3-ethyl-1-methyl-N-[[4-(4-methylphenoxy)phenyl]methyl]pyrazole-5-carboxamide Bifenthrin: trans-(2-methyl-3-phenyl phenyl)methyl (1R,3R)-3-[(Z)-2-chloro-3,3,3-trifluoroprop-1-enyl]-2,2-dimethylcyclopropane-1-carboxylate		
Synonyms	Tolfenpyrad 15% + Bifenthrin 7.5% SE	Trade Name	TREZA
Uses	Insecticide	Molecular Formula	$C_{21}H_{22}ClN_5O_2 + C_{23}H_{22}ClF_3O_2$
Manufacturer/Supplier	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		
Emergency Contact	9503095030	E-mail	info@agrostar.in

2: COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Percent or Content (w/w)
Tolfenpyrad	29558-76-5	15.00%
Bifenthrin	82657-04-3	7.50%
1-2-benzisothiazole-3- (2H)-one, sodium salt	2634-33-5	0.15%
Inert Ingredients	-	77.35%

3: HAZARD IDENTIFICATION

Hazard Classification:	Acute Toxicity (Oral) category 4; Acute aquatic toxic category 1; chronic aquatic toxicity category 1
Health Hazard:	H302 Harmful if swallowed; H315 Causes skin irritation; H317 May cause an allergic skin reaction H318 Causes serious eye damage; H319 Causes serious eye irritation; H332 Harmful if inhaled.
Environmental Hazard:	H 400 Very toxic to aquatic life H 410 Toxic to aquatic life, 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. 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: In the event of fire, dense black smoke containing hazardous products of combustion is produced as the product contains combustible organic components. Exposure to decomposition products may be a hazard to health.

Hazardous Thermal (de)composition: Toxic and irritating vapours or gases will release on 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. No open flames, no sparks, and no smoking

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, using an absorbent material to collect it. Collect spilled material in sealed containers. Clean contaminated floors and objects thoroughly with water and detergents. Avoid solvents. 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.

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Ensure area is well-ventilated and set up emergency exits and the risk-elimination 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. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

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	Relative Density [g/cc]: 1.05 to 1.15	Physical State: Liquid
Colour: White to off-white liquid	Odour: Characteristic	Melting Point [°C]: Not applicable
Solubility in Water: No data	pH: 5 – 9.0 (1% Aqueous Solution)	

10: STABILITY & REACTIVITY

Stability: Stable under normal circumstances.

Conditions to Avoid: None known

Hazardous Decomp. Products: Combustion or thermal decomposition will evolve toxic and irritant vapors.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : > 5000	Rat inhalation LC50 [mg/l/4h] : > 5.0	Skin irritation (rabbit): Non-irritant
Dermal (rat) LD50 [mg/kg]: >2000	Skin Sensitization (Guinea Pig): Non-Sensitizer	Eye irritation (rabbit): Mild Irritant

12: ECOLOGICAL INFORMATION

Ecotoxicity

Rainbow trout LC50 (96 hrs) [mg/L]: 0.43

Water flea EC50 (48 hrs) [mg/L]: 0.38

Green algae EC50 (72 hrs) [mg/L]: 0.52

Bio-accumulation Potential: No data available.

Persistence, Degradability and Mobility in soil: Not readily biodegradable; Moderately mobile in soil

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. 3082 **Proper Shipping Name:** Environmentally hazardous substance, Liquid, N.O.S. Tolfenpyrad & Bifenthrin

Land Transport (ADR/RID): Class-9, Packing group-III

Sea Transport (IMO/IMDG): Class-9, Packing group-III, Marine Pollutant-Yes

Air Transport (IATA/ICAO): Class-9, Packing group-III, Environment hazard mark- Yes

15: REGULATORY INFORMATION

Hazard Symbol: GHS07, GHS09

H-Statement: H302, H315, H317, H318, H319, H332, H400, H410

16: OTHER INFORMATION

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