

## 1: IDENTIFICATION

<b>Chemical Name</b>	Diafenthiuron: 1-tert-butyl-3-[4-phenoxy-2,6-di(propan-2-yl)phenyl]thiourea 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		
<b>Synonyms</b>	Diafenthiuron 47% + Bifenthrin 9.4% SC		
<b>Uses</b>	Insecticide	<b>Trade Name</b>	<b>BIFENTEX</b>
<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)
Diafenthiuron	80060-09-9	47.00%
Bifenthrin	82657-04-3	9.40%
Inert Ingredients	-	Q.S

## 3: HAZARD IDENTIFICATION

**Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria:** Classified as hazardous.

**Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), IATA and IMDG/MSBC:** Classified as Dangerous Good

**Product Hazard Classification:** Acute Toxicity (Inhalation) 2 H330 Fatal if inhaled.  
STOT RE 2 H373 May cause damage to the respiratory system through prolonged or repeated exposure

**Signal Word:** Danger

**Hazard Statements** H330 Fatal if inhaled. H373 May cause damage to the respiratory system through prolonged or repeated exposure

## 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.

### Symptoms Caused by Exposure:

Inhalation: Fatal if inhaled. May cause respiratory irritation.

Eye Contact: May cause eye irritation.

Skin Contact: May cause skin irritation.

Ingestion: May cause gastrointestinal irritation, nausea, diarrhoea and vomiting

**Note to Physician:** No specific Antidote. Treat symptomatically.

## 5: FIRE FIGHTING MEASURES

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

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

**Specific Hazards:** Hazardous combustion products include oxides of carbon and dense, black smoke. Product is not flammable. However, it may burn in a larger fire.

**Hazardous Thermal (de)composition:** Oxides of carbon.

**Special Procedures:** Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. 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. 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:** Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Clean spill area with water and detergents. Avoid solvents. Dispose of in accordance with local regulations.

## 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. Use only outdoors or in a well-ventilated area. Good personal hygiene procedures must be practiced. Food, beverages and tobacco products should not be stored or consumed where this material is in use.

**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, especially 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 under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible.

**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 eye and face protectors for protection against splashing materials or liquids should be used. Safety showers and eyewash should be easily available.

**Others:** Wash clothing before reusing.

## 9: PHYSICAL/CHEMICAL PROPERTIES

<b>Appearance:</b> Off - white colour suspension	<b>Flashing Point [°C]:</b> > 100	<b>Odour :</b> Characteristic	<b>Physical State:</b> Liquid
<b>Colour:</b> Off- White	<b>Flammability:</b> Product is not flammable. However, it may burn in a fire.		<b>Melting Point [°C]:</b> Not applicable
<b>Solubility in water:</b> No data available	<b>pH:</b> 6-10	<b>Auto-ignition Temperature [°C]:</b> 495	<b>Density [g/cc]:</b> 1.03 – 1.07

## 10: STABILITY & REACTIVITY

**Stability:** Stable under normal circumstances. **Conditions to Avoid:** No further relevant information available

**Hazardous Decomp. Products:** Oxides of carbon and dense, black smoke.

**Incompatible Materials:** No further relevant information available.

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

## 11: TOXICOLOGICAL INFORMATION

<b>Bifenthrin</b>	Rat oral LD50 [mg/kg] : >2000	Rat inhalation LC50 [mg/l/4h] : 0.35	Dermal (rat) LD50 [mg/kg]: >4000
<b>Diafenthion</b>	Rat oral LD50 [mg/kg] : 2,068	Rat inhalation LC50 [mg/l/4h] : 1.953	Dermal (rat) LD50 [mg/kg]: >2,000
<b>Acute Health Effects</b>	Inhalation: Fatal if inhaled. May cause respiratory irritation.	Skin: May cause skin irritation.	Eye: May cause eye irritation.

**Skin Corrosion/Irritation:** Based on classification principles, the classification criteria are not met.

**Serious Eye Damage/Irritation:** Based on classification principles, the classification criteria are not met.

**Respiratory or Skin Sensitisation:** Based on classification principles, the classification criteria are not met.

**Carcinogenicity:** This product does NOT contain any IARC listed chemicals

**Chronic Health Effects:** No data associated with long term health effects.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Single Exposure:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:** May cause damage to lungs through prolonged or repeated exposure.

## 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Aquatic toxicity: Very toxic to aquatic life with long lasting effects

Rainbow trout LC50 (96 hrs) mg/L: 0.00852

Daphnia magna EC50 (48 hrs) mg/L: 0.00285

**Bio-accumulation Potential:** Bioaccumulation of diafenthion is expected (log Pow: 5.76 (25 °C)).

**Persistence and Degradability:** No data available on finished product.

**Other Adverse Effects:** No further relevant information available

**Mobility in Soil:** If it enters soil, it will adsorb to soil particles and will not be mobile. Indicate no permanent damage up to 0.020 mg/l. Product is considered a marine pollutant.

## 13: DISPOSAL CONSIDERATION

**Waste-disposal Procedures:** Dispose according to applicable local and state government regulations. or dispose of according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container.

**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. (Diafenthion 47 % + Bifenthrin 9.4 % SC)

**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

## 15: REGULATORY INFORMATION

**Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:** 5

**Hazard Symbol:** GHS06, GHS08

**H-Statement:** H330, H373

## 16: OTHER INFORMATION

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