

1: IDENTIFICATION

Chemical Name	Thifluzamide: N-[2,6-dibromo-4-(trifluoromethoxy)phenyl]-2-methyl-4-(trifluoromethyl)-1,3-thiazole-5-carboxamide Difenoconazole: 1-[[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-yl]methyl]-1,2,4-triazole	Trade Name	RULE
Synonyms	Thifluzamide 15% + Difenoconazole 20% SC	Molecular Formula	$C_{13}H_6Br_2F_6N_2O_2S + C_{19}H_{17}Cl_2N_3O_3$
Uses	Fungicide		
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)
Thifluzamide	130000-40-7	15.00%
Difenoconazole	119446-68-3	20.00%
Others	-	Q.S

3: HAZARD IDENTIFICATION

Physical/Chemical Hazard:	Thifluzamide: Chronic aquatic toxicity cat. 1 Difenoconazole: Chronic aquatic toxicity cat. 1	Acute aquatic toxicity cat. 1 Acute aquatic toxicity cat. 1
Human Health Hazard:	H 315: cause skin irritation	
Environmental Hazard:	H410: Very toxic to aquatic life with long lasting effects.	H400 Very toxic to aquatic life

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 and keep warm and at rest in a position comfortable for breathing. If breathing is difficult, treat with artificial respiration preferably mouth-to-mouth if possible. Immediately seek medical attention if symptoms are severe or persist

Ingestion: Rinse mouth with water thoroughly and give plenty of water to drink. Never give anything by mouth to an unconscious person. Do not induce vomiting unless directed by the poison control center or doctor. Seek medical attention or poison control center immediately and show this container or label.

Skin Contact: In case of contact with product, remove contaminated clothes and wash exposed skin area with plenty of water and soap immediately. Seek medical attention if irritation persists.

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 or fog, alcohol-resistant foam, dry chemical powder.

Unsuitable Extinguishing Media: No data available.

Specific Hazards: Risk of hazardous fumes.

Hazardous Thermal (de)composition: The decomposition products are toxic fumes such as oxides of carbon and nitrogen

Special Procedures: 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. Collect extinguishing water separately and do not discharge into the drain or water bodies. If risk of water pollution occurs, notify appropriate authorities. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Protection of Fire Fighters: Do not breathe a fumes, Wear fire/ flame resistant/retardant clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing. Use personal protective equipment. Evacuate personnel to safe areas and keep them away from and upwind of spill/leak.

Environmental Precaution: Do not allow runoff to enter drains and public waters. Notify the authorities if product enters.

Methods for Cleaning-up: Adsorb spillages sand, clay or other absorbent material. Collect and transfer into waste disposal containers. Clean contaminated floors and objects thoroughly with water and detergents. Dispose of in accordance with local regulations. Wear suitable protective equipment.

7: HANDLING & STORAGE

Handling: Do not smoke, drink, or eat during handling. Wash hands and other exposed areas with mild soap and water before and after handling material. Wear protective equipments to avoid contact and/or inhalation with the product. Wash clothing and equipment before reuse. 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 children, seeds, fertilizer, foods and animal feeds. Protect from direct sunlight.

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Ensure adequate ventilation especially in confined areas. Handle in accordance with good industrial hygiene and safety practice.

General Protection: Avoid breathing dust, vapours or aerosols. Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves. 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 with a universal filter type including particle filter.

Skin Protection: Wear suitable protective clothing, including long sleeved shirt, long pants, gloves, coveralls, and boots to avoid skin contact.

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 should be used. Safety showers and eyewash should be easily available.

Others: Wash clothing before reusing.

9: PHYSICAL/CHEMICAL PROPERTIES

Appearance : Brown colour liquid **pH :** 6.0-8.0 (1% aq. sol.)

Physical State: Liquid

Colour: Brown

Density[g/cc]: 1.16 – 1.24

Odour: Faint

Solubility in water: No data available

10: STABILITY & REACTIVITY

Stability: Stable under normal circumstances. **Conditions to Avoid:** Heat, flames and sparks. **Materials to Avoid:** None known

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

11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg]: 6500

Rat inhalation LC50 [mg/l/4h]: 5.5

Skin irritation (rabbit): Irritant

Dermal (rat) LD50 [mg/kg] : >2000

Skin Sensitization (Guinea Pig): Non-sensitizer

Eye irritation (rabbit): Moderate Irritant

12: ECOLOGICAL INFORMATION

Ecotoxicity:

Bluegill sunfish LC50 (96 hrs)[mg/L]: 1.2

Honeybees LC50 (contact)[µg/bee.]: >100

Mallard ducks LC50 (96 hrs)[mg/kg]: >2250

Bio-accumulation Potential: Does not bioaccumulate

Persistence, Degradability and Mobility in soil: Not persistent in the environment. Both are biodegradable

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. Break, crush, or puncture and dispose to waste management facility or dispose of in compliance with local regulations. DO NOT burn empty containers or product.

Contaminated packaging: Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the product. Do not reuse container unless they are specifically designed to be refilled

14: TRANSPORT INFORMATION

UN No. 3082 **Proper Shipping Name:** Environmentally hazardous substance

Land Transport (ADR/RID): Class-6.1, Packing Group-III **Sea Transport (IMO) (IMDG):** Class-6.1, Packing group-III, Marine Pol.-Yes

Air Transport (IATA / ICAO): Class-6.1 Packing group-III, Environmental hazard mark-Yes

15: REGULATORY INFORMATION

Hazard Symbol: GHS09, Xn - Harmful, N - Dangerous for the environment

Risk Phrase: R20, R25, R36, R43, R50/53, R51/53

Safety Phrase: S2, S24, S28, S36/37, S60

16: OTHER INFORMATION

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