



INDOFIL INDUSTRIES LIMITED
 KOLSHET, OFF SWAMI VIVEKANAND ROAD,
 AZAD NAGAR, SANDOZ BAUG P.O.,
 THANE – 400 607. MAHARASHTRA (INDIA)
 TEL. NO. : 00-91-22- 67999100
 FAX NO. : 00-91-22-2589 83 57

2-R&D-MSDS-FP-451

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION		
Chemical Name	THIFLUZAMIDE 24% SC IUPAC : 2',6'-dibromo-2-methyl-4'-trifluoromethoxy-4-trifluoromethyl-1,3-thiazole-5-carboxanilide	Company Identification INDOFIL INDUSTRIES LIMITED KOLSHET, OFF SWAMI VIVEKANAND ROAD, AZAD NAGAR, SANDOZ BAUG P.O., THANE – 400 607. MAHARASHTRA (INDIA) TEL. NO. : 00-91-22- 67999100 FAX NO. : 00-91-22-2589 83 57 / 59
Trade Name	IGLARE	
Synonyms	THIFLUZAMIDE	GROUP: Anilidine Fungicide
CAS Number	130000-40-7	CLASS : FUNGICIDE
Formula	C ₁₃ H ₆ Br ₂ F ₆ N ₂ O ₂ S	
SECTION 2. COMPOSITION / INFORMATION OF INGREDIENTS		
COMPONENT NAME	CAS REGISTRY NO	CONCENTRATION
THIFLUZAMIDE	79983-71-4	24 %
Inert ingredients	-	76%
SECTION 3. HAZARDS IDENTIFICATION		
EMERGENCY OVERVIEW		
Physical state: Liquid		
Colour: Light Brown to Off-white		
INGESTION: Harmful if swallowed.		
INHALATION: May cause irritation to Throat, Nose and Lungs		
EYE CONTACT: Direct contact may cause moderate eye irritation.		
SKIN CONTACT: May cause slight irritation.		
DELAYED EFFECTS: No delayed effects known.		

IMMEDIATE HEALTH EFFECTS

Eye contact	Moderate irritation to eyes.
Skin contact	Slight irritating.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.

DELAYED OR OTHER HEALTH EFFECTS

Target organs	No data .		
An "X" in the box adjacent to the hazard title indicates OSHA Hazard classification. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication standard (29 CFR 1910.1200)			
OSHA Health Hazard Classification		OSHA Physical Hazard Classification	
Toxic <input type="checkbox"/>	Highly Toxic <input type="checkbox"/>	Flammable <input type="checkbox"/>	Oxidizer <input type="checkbox"/>
Irritant <input type="checkbox"/>	Sensitizer <input type="checkbox"/>	Combustible <input type="checkbox"/>	
Corrosive <input type="checkbox"/>	Carcinogenic <input type="checkbox"/>	Explosive <input type="checkbox"/>	Organic Peroxide <input type="checkbox"/>
		Pyrophoric <input type="checkbox"/>	unstable <input type="checkbox"/>
		Organic peroxide <input type="checkbox"/>	water-reactive <input type="checkbox"/>

SECTION 4 : FIRST AID MEASURES

Eye	Flush eyes with water immediately while holding with eyelids open. Get medical attention if irritation persists..
Skin	Remove contaminated clothing and shoes immediately. Wash contaminated area with soap or mild detergent and large amount of water until no effects of chemical remains. If symptoms persist get medical help.
Ingestion	Remove by gastric lavage and catharsis, maintain blood pressure and airway, Give oxygen if respiration is depressed. Do not perform gastric lavage if victim is unconscious. Get medical attention immediately.
Inhalation	Remove the patient from the exposure area to fresh air immediately. If breathing has stopped perform the artificial respiration. Keep person warm and rest. Get medical attention immediately.
Notes to physician	If swallowed, careful evacuation of stomach is advisable.

SECTION 5 : FIRE FIGHTING MEASURES

NFPA Flammability Classification	-----
NFPA RATINGS	Health: 1 Flammability : -- Reactivity:----
OSHA classification	No data
Flash point	Not Combustible
Flammability (Explosive limits)	NA
Auto ignition Temperature	Not Applicable.
Hazardous Combustion products	During a fire, irritating and possibly toxic gases like carbon dioxide, carbon monoxide, nitrogen oxides, sulfur dioxide, hydrogen chloride, may be generated by thermal decomposition or combustion.

Extinguishing Media	Dry chemical, CO ₂ , Water spray, standard foam. For larger fire, use water spray, fog or standard foam.
Protection of Fire Fighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Special Properties	Avoid breathing fumes from fire exposed material.
SECTION 6 : ACCIDENTAL RELEASE MEASURES	
Protective Measures	Ensure suitable personal protection during removal of Spillages. This means wearing a face mask that gives protection against organic vapours, eye protection, Chemically resistant gloves, boots and coveralls.
Spill Management	Absorb the material in the sand, soil, diatomaceous earth or suitable absorbent. Place in suitable material and remove to safe place or dispose of in an incinerator approved for chemicals.

SECTION 7 : HANDLING AND STORAGE

Handling & Storage procedure	Use appropriate (impervious) clothing, gloves and closed foot ware to prevent the repeated contact with skin. Use flash proof and dust resistant goggles to prevent the contact with eyes. Keep the product in original container tightly closed and correctly labeled. Store in suitable, cool, dry, well ventilated place under lock and key; away from the reach of the children, animals, food and animal feeding stuffs. Store away from the incompatible substances and source of ignition.
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SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls	Ventilation: Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposures. Use mechanical exhaust ventilation at sources of air contamination such as open process equipment.
Personal Protective Equipment	Eye / face Protection: Safety Glasses or goggles. Skin protection: Avoid skin contact. Rubber gloves should be worn whenever this material is handled. Wash hands with clean water. Body protection: Avoid skin contact Wear impervious clothing and closed foot ware. Respiratory Protection: Wear suitable mask.

Occupational exposure limits (exposure limit information)

Component	Limit	TWA	STEL	Ceiling	Notation
Thifluzamide	OSHA ACGIH	No data	No data	No data	No data

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	Colour	Light Brown To Off-white
Odor	Mild Odour	pH (1% aq. solution)	4 To 8
Specific gravity Bulk density	1.15 ± 0.04 gm /ml	Solubility in water	Forms Suspension in water
Vapor pressure	Not applicable	Vapor density	< 1 Water
Viscosity	500 To 900 cps	Boiling point	No Data
Melting / Freezing point	No Data	Evaporation rate	No Data

SECTION 10: STABILITY AND REACTIVITY

Chemical stability	This material is chemically stable under normal and anticipated storage and handling conditions.
Conditions to Avoid	Excessive temperatures.
Material Incompatibility	Incompatible with strong oxidizing agents
Hazardous Decomposition Products	Decomposition will evolve hydrogen bromide or hydrogen flouride
Hazardous Polymerization	This product will not undergo polymerization reaction.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity (Assessment largely or completely based on data for active substance)	
Acute Oral toxicity	>6500 mg/kg male rats
Acute Dermal toxicity	> 5000 mg/kg (Rabbit)
Acute Inhalation toxicity	>5 mg/ml for 4 Hr.
Eye irritation (Rabbit) : Moderate irritating	
Skin irritation(Rabbit) : Slight irritating	

SECTION 12: ECOLOGICAL INFORMATION

Eco-toxicity: No data	
Environmental fate	No data

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL PROCEDURES: Waste disposal should be in accordance with existing federal, state and local environmental regulations. Dispose of empty, used containers in approved incineration plant in approved land filling area or in a disposal pit away from desirable plants and their roots and water courses. On-site disposal of undiluted product is unacceptable

SECTION 14: TRANSPORT INFORMATION	
	This product is not classified as a dangerous goods.
DOT Shipping Name	DOT Technical Name : THIFLUZAMDIE
DOT Hazard class	Class : 9 UN number : 3077
DOT identification number	Packaging group III
DOT additional information	Classified as non Dangerous goods for transport by road and Rail.

SECTION 15: REGULATORY INFORMATION	
Work place classification	Hazard categories under criteria of SARA Title III rules (40 CFR part 370) Immediate acute health Y Delayed chronic health N Fire N Reactive N Sudden Release of pressure N
SARA TITLE 3 : SECTION 311/312 Hazard Identification	Harmful, Toxic
SARA TITLE 3 : SECTION 302/304 Emergency planning and notification	-----
SARA TITLE 3 : SECTION 313 Toxic chemical notification and Release reporting	This product does contain chemicals which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of title III of the superfund amendments and Reauthorization act of 1986 and 40 CFR part 372
CERCLA (40 CFR 302.4)	-----
Waste classification	No data
Clean Air Act	No data

SECTION 16: OTHER INFORMATION			
NFPA RATINGS	Health : 1	Flammability : --	Reactivity :---
HMIS RATINGS	Health : ----	Flammability :----	Reactivity :---
	0 = Least 1= slight 2= Moderate 3= High 4=Extreme		

ABBREVIATIONS

STEL	Short term exposure limit
ACGIH	American conference of Government Industrial Hygienists
NIOSH	National institute of safety and health
SARA	Super fund Amendments and Reauthorization Act
TWA	Time weighted average
OSHA	Occupational safety and health
NFPA	National Fire protection agency
HMIS	Hazardous Materials information system
RCRA	Resource conservation Recovery act
TSCA	Toxic substance Control Act
WHMIS	Work place Hazardous Materials information system
IRAC	International Agency for Research on Cancer

MANUFACTURE'S / SUPPLIER'S DATA

Name of Firm : INDOFIL INDUSTRIES LIMITED				
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Fax 2589 8357	Telegraphic Code		Fax 22767 5083	
Local Bodies Involved	Collector of Thane			

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