

**INDOFIL CHEMICALS COMPANY**  
 KOLSHET, OFF SWAMI VIVEKANAND ROAD,  
 AZAD NAGAR, SANDOZ BAUG P.O.,  
 THANE – 400 607. MAHARASHTRA (INDIA)  
 TEL. NO. : 00-91-22-6799 9100  
 FAX NO. : 00-91-22-2589 83 57 / 59



## MATERIAL SAFETY DATA SHEET

### 2-R&D-MSDS- AGRO-FP- 400

<b>SECTION 1. PRODUCT IDENTIFICATION</b>		
<b>Chemical Name</b>	<b>Myclobutanil tech.</b> 2-(4-chlorophenyl)-2-(1H-1,2,4-triazol-1-yl methyl)hexane nitrile	<b>Company Identification</b> INDOFIL CHEMICALS COMPANY KOLSHET, OFF SWAMI VIVEKANAND ROAD, AZAD NAGAR, SANDOZ BAUG P.O., THANE – 400 607. MAHARASHTRA (INDIA) TEL. NO. : 00-91-22-6799 9100 FAX NO. : 00-91-22-2589 83 57 / 59
<b>Trade Name</b>	<b>BOON</b> <b>Myclobutanil 10% WP</b>	
<b>Synonyms</b>		<b>Chemical classification:</b> Azole group fungicide
<b>IUPAC</b>		
<b>CAS Number</b>	88671-89-0	
<b>Formula</b>	C <sub>15</sub> H <sub>17</sub> Cl N <sub>4</sub>	

### SECTION 2. COMPOSITION / INFORMATION OF INGREDIENTS

COMPONENT NAME	CAS NO	CONCENTRATION
Myclobutanil tech.	88671-89-0	10% W/W
Silica		11.3% W/W
Sodium lignosulphonate		6.00% W/W
Alkyl naphthalene sulfonate of sodium		2.00% W/W
Chinaclay		Qs to make

### SECTION 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Physical state : Powder

Colour : Off white free flowing powder

Primary routes of exposure : Eye contact, skin contact, inhalation

**IMMEDIATE HEALTH EFFECTS**

<b>Eye contact</b>	Causes substantial irritation
<b>Skin contact</b>	Slight irritant to skin
<b>Ingestion</b>	Material is possibly harmful if swallowed.
<b>Inhalation</b>	Prolonged inhalation is possibly harmful
<b>Emergency Treatment</b>	Move subject to fresh air. Apply artificial respiration and oxygen, if necessary, seek medical aid immediately.

**DELAYED OR OTHER HEALTH EFFECTS**

Target organs	NA
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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
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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**

<b>Eye</b>	Hold eye open and rinse slowly and rinse gently with fresh water for 15-20 minutes. If irritation persists, consult a medical Physician.
<b>Skin</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water and soap for 15-20 minutes.
<b>Ingestion</b>	Give two glasses of water to drink or medical charcoal in plenty of water. Seek medical attention if a large column of concentrate was ingested or if irritation should persist. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Move person to fresh air. Give artificial respiration if required and call ambulance.
<b>Notes to physician</b>	If swallowed, careful evacuation of the stomach is advisable.

**SECTION 5 : FIRE FIGHTING MEASURES**

<b>NFPA Flammability Classification</b>	-----
<b>NFPA RATINGS</b>	-----
<b>OSHA classification</b>	-----

<b>Flash point</b>	NA
<b>Flammability (Explosive limits)</b>	NA
<b>Auto ignition Temperature</b>	No data
<b>Hazardous Combustion products</b>	No data
<b>Extinguishing Media</b>	For small fires use carbon dioxide, dry chemical, water spray.
<b>Protection of Fire Fighters</b>	Special procedures: wear self-contained breathing apparatus and clothing.
<b>Special Procedures</b>	-----

### **SECTION 6 : ACCIDENTAL RELEASE MEASURES**

<b>Personal Protective Measures</b>	Appropriate protective equipment must be worn when handling a spill of this material. Remove all contaminated clothing promptly. Wash all exposed skin areas with soap & water immediately after exposure. Do not take clothing home to be laundered. Steps to be taken.
<b>Spill Management</b>	Control the spill at its source. Appropriate protective equipment to be used when handling a spill. Remove all contaminated clothing promptly and do not take it home for cleaning. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean the spills immediately. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent. Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in disposal containers, seal container and arrange for disposition.

### **SECTION 7 : HANDLING AND STORAGE**

<b>Handling</b>	Handling procedures : Use only with adequate ventilation. Locate safety shower and eyes wash station close to chemical handling area. Use normal good industrial hygiene and housekeeping practices. Do not handle the material near food, feed or drinking water.
<b>Storage</b>	Storage requirements: Keep containers closed. Keep out of reach of children and pets. Do not store the material near food, feed or drinking water. To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity.

### **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Engineering controls</b>	Provide exhaust ventilation or other engineering controls. An emergency eye wash station and safety shower should be located near the work-station.
<b>Personal</b>	<b>Eye Protection:</b> Wear eye protection such as safety glasses, chemical

<b>Protective Equipment</b>	<p>goggles, or face shields if engineering controls or work practices are not adequate to prevent eye contact. Contact lenses should not be worn when working with this chemical. Facilities storing or utilising this material should be equipped with an eyewash facility and a safety shower.</p> <p><b>Hand protection:</b> Avoid skin contact .Use gloves. Wash hands with plenty of mild soap and water before eating, drinking, use of toilet facilities or leaving work.</p> <p><b>Body protection:</b> Avoid skin contact. Wear long-sleeved fire-retardant garments. Additional chemical-resistant protective gear may be required. This may include an apron, boots and additional facial protection.</p> <p><b>Respiratory Protection:</b> Dust / mist filtering respirator or a NIOSH approved respirator .</p> <p><b>Work practices:</b> users should wash hands before eating, drinking, 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 outside of gloves before removing. As soon as possible wash thoroughly and change into clean clothing. Deluge safety shower and eye wash station should be located in work area</p>
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### Occupational exposure limits

Component	Limit		
Myclobutanil tech.	NA		

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Powder	<b>Colour</b>	Off white free flowing powder
<b>Odor</b>	Characteristic	<b>PH (1%)</b>	NA
<b>Specific gravity (Water=1)</b>	NA	<b>Solubility in water</b>	NA
<b>Vapor pressure</b>	NA	<b>Vapor density (Air=1)</b>	NA
<b>Density</b>	0.32 g/cc	<b>Corrosion</b>	Non - corrosive.
<b>Melting point (°C)</b>	NA	<b>Stability</b>	Relatively stable to hydrolysis

### SECTION 10: STABILITY AND REACTIVITY

<b>Chemical stability</b>	Stable
<b>Conditions to Avoid</b>	Keep away from heat and ignition sources. Avoid moisture in storage . stable at room temperature
<b>Material Incompatibility</b>	NA
<b>Hazardous</b>	There are no hazardous decomposition products for this

<b>Decomposition Products</b>	Material.
<b>Hazardous Polymerization</b>	Product will not undergo polymerization.

### SECTION 11: TOXICOLOGICAL INFORMATION

Acute Oral toxicity	LD 50 (oral – Rat) = 2290mg/kg ( female ) = 1600 mg/kg ( male ) LD 50 (oral – Rabbit ) = 5000mg/kg
Acute Dermal toxicity	NA
Acute Inhalation toxicity	NA
Eye irritation: Rabbit. Non- irritant to eye. Skin irritation: Rabbit. Non-irritant	

### SECTION 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Myclobutanil 10% WP is toxic to aquatic organisms. Do not contaminate domestic or irrigation water supplies, lakes, streams, ponds or rivers.
<b>Environmental fate</b>	Persistence (Half-life): Soil: 66 days. In animals undergoes oxidation at the butyl group to a ketone and an alcohol with partial conjugation to a glucoside . Following administration, rapidly in the faeces and urine. In plants , metabolism is the same as in animals.

### SECTION 13: DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material , if it must be discarded , may meet the criteria of a hazardous waste as defined by US EPA under RCRA ( 40 CFR part 261) or other state and local 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. Breaking, crushing or puncturing the container to prevent reuse.

Disposal Should be in accordance with local state or national legislation. Remove to a safe location and bury on an authorized landfill site. Do not burn empty containers or Product.

### SECTION 14 : TRANSPORT INFORMATION

	Not regulated as a hazardous material by any mode of transportation. <b>Export water (IMO)</b> : Not regulated <b>Air (ICAO / IATA)</b> : Not regulated
<b>DOT Shipping Name</b>	
<b>DOT Hazard class</b>	Not regulated
<b>DOT identification number</b>	No data
<b>DOT packing Group</b>	No data
<b>DOT additional information</b>	No data

<b>SECTION 15: REGULATORY INFORMATION</b>	
<b>TSCA Inventory</b>	No data
<b>SARA 311/312 Hazard Identification</b>	No data
<b>SARA 302/304 Emergency planning and notification</b>	No data
<b>SARA 313 Toxic chemical notification and Release reporting</b>	This product contains the following components in concentrations above that are listed as toxic chemicals in 40 CFR part 372 pursuant to the requirements of section 313 of SARA.
<b>CERCLA</b>	No data
<b>Clean air act (CAA)</b>	Not applicable

<b>SECTION 16: OTHER INFORMATION</b>			
<b>NFPA RATINGS</b>	Health : 1	Flammability :0	Reactivity :1
<b>HMIS RATINGS</b>	Health : 1	Flammability :0	Reactivity :1
	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**

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Local Bodies Involved	Collector of Thane			

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