



Regd. Off. : 1501, Vikram Tower, Rajendra Place,

New Delhi-110008, (India)

Phones: 91-11-41538383 (8 Lines) Fax: 41538600, 25727781

E-mail: info@bharatgroup.co.in

Website: www.bharatgroup.co.in

MATERIAL SAFETY DATA SHEET

MSDS No: MSDS/ACE/FG-017

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

ProductName	: Myclobutanil Technical
IUPAC Name	: 2-p-Chlorophenyl-2-(1H-1,2,4-triazol-1-ylmethyl)hexane Nitrile.
Mole.formula	: C ₁₅ H ₁₇ CIN ₄
Mole weight	: 288.8
Uses	: Fungicide
Manufacturer / Supplier	: Bharat Rasayan Limited 1501, Vikram Tower, Rajendra Place, New Delhi – 110008, INDIA
Emergency Phones	: +91-11-43661120,1104 Fax 43661100

2. Composition / Information on ingredients

Chemical Name	CAS#	Percent or content (w/w)
Myclobutanil	88671-89-0	92.00 %
Other ingredients	-	6.00 %

3. Health Hazards Identification

Primary routes of exposure	:	Eye contact, skin contact, inhalation
Inhalation	:	Prolonged inhalation is possibly harmful
Ingestion	:	Possibly harmful if swallowed
Skin	:	Slight irritant to skin

Eye : Causes substantial irritation

4. First Aid Measures

Eyes Hold eye open and rinse slowly and gently with fresh water for 15 - 20 minutes. If irritation persists, consult a medical physician.

Skin Prolonged or repeated skin contact may cause irritation. The systemic toxicity has not been determined.

Ingestion Drink 1 or 2 glasses of water or milk, and induce vomiting by touching the back of the throat with a finger. If possible, contact a physician, poison control, or an emergency center before inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person.

the nearest
emergency treatment center.

Inhalation Remove person from exposure area to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. Get medical attention.

5. Fire Fighting Measures

Fire Not expected to be a fire hazard

Explosion None identified
Suitable Extinguishing Media Media suitable to extinguish the supporting or surrounding fire like carbon dioxide, dry chemical or water spray.

Flash point 203oF (95oC)

6. Accidental Release Measures

In case of spill or leak: 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.

7. Handling and Storage

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling. When handling and processing this material, local exhaust ventilation may be required to control dust and reduce exposure to vapors. To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity.

8. Exposure Controls/Personal Protection

Ingestion

Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye protection

Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with eyewash facility and a safety shower.

Skin Protection

Where contact is likely wear chemical-resistant gloves, coverall, socks and chemical-resistant foot wear. For overhead exposure, wear chemical resistant head gear.

Inhalation

Use approved chemical cartridge respirator with organic vapor cartridges and Pre-filters or a supplied air respirator

9. Physical and Chemical Properties

Appearance

Light cream colour crystalline solid

Odour

No distinguish odour

Melting Point

71 - 72oC

Boiling Point

390.8oC

pH

8 to 9

Vapour Pressure

1.98 x 10⁻¹ Pa at 20oC

Water solubility

124 mg/l (pH 3), 132 mg/l (pH 7),
115 mg/l (pH 9-11)

Relative density

1.1948 g/ml

10. Stability and Reactivity

Chemical Stability

stable material

Hazardous Polymerization

Will not occur

Hazardous decomposition

There are no hazardous decomposition products for this material

11. Toxicological Information

Acute Oral Toxicity
Acute Dermal Toxicity

LD50 (Rats) 2500.86 mg/kg b.w

LD50 (Rabbits) > 2,000 mg/kg b.w

Acute Inhalation

LC50 (rats): > 1.04 mg / L air (4 h)

Eye Irritation

Rabbit: Non irritant

Skin Irritant

Rabbit: It can cause irritation to the eyes

Skin Sensitization

Guinea pig: Non-sensitizing

12. Ecological Information

Birds

Acute oral LD50 (Bobwhite quail) 510 mg/kg bw Dietary LC50 (8 d, Bobwhite quail) >5000 mg/kg Dietary LC50 (8 d, mallard ducks) >5000 mg/kg

Fish

LC50 (96 h) for Rainbow trout 2.0 mg/l, Bluegill sunfish 4.4 mg/l

Bees

LD50 (oral) >171 g/bee
LD50 (contact) >200 g/bee

13. Disposal Considerations

Waste Disposal Method

Do not reuse product containers. Dispose of product containers, waste containers and residues according to local, state and federal health and environmental regulations.

14. Transport Information

Rail/Road (RID/ADR)

Proper Shipping Name :

PESTICIDE,
SOLID, TOXIC,
N.O.S

Class	:	6.1
UN No.	:	2588
Packing Group	:	III
Sea (IMDG – Code)		
Proper Shipping Name	:	PESTICIDE, SOLID, TOXIC, N.O.S
Class	:	6.1
IMDG No.	:	2588
Packing Group	:	III
Air (ICAO/IATA)		
Proper Shipping Name	:	PESTICIDE, SOLID, TOXIC, N.O.S
Class	:	6.1
UN No.	:	2588
Packing Group	:	III

15. Regulatory Information

EU- Classification Hazard Symbol	Xn N	Harmful Dangerous for the environment
Special Risks (R-Phrases)	22	Harmful if swallowed
43		May cause sensitization by skin contact
50/53		Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
Safety Advice (S-Phrases)	36/37	Wear suitable protective clothing and gloves.
46		If swallowed, seek medical advice immediately and show this container or label.
60		This material and its container must be disposed of as hazardous waste
61		Avoid release to the environment. Refer to special instructions/Safety data sheets.
International WHO Toxicity Classification	III	Slightly hazardous

16. OTHER INFORMATION

The information provided in this MSDS is of general nature not specific for a particular purpose or situation, and believed to be correct and faithful. **Bharat Rasayan Limited** does not make any warranty or guarantee of any kind regarding fitness or completeness of information. **Bharat Rasayan Limited** disclaims any liability to the result(s) obtained or arising out of any use of the product or reliance on data/information contained in this MSDS.

Prepared by: Bharat Rasayan Limited: EHS Department

Issue Date: 14/05/2012.