

MATERIAL SAFETY DATA SHEET



Nagarjuna Agrichem Limited

Emergency Phone: 040 33605264

Plot No.12-A, 'C' Block, Lakshmi Towers,
Nagarjuna Hills, Punjagutta, Hyderabad- 500082.
Andhra Pradesh, INDIA

MYCLOBUTANIL TECHNICAL

MSDS No.: NACL T 3001

1. Product and Company Identification

Product Name : Myclobutanil Technical
Chemical Name : (RS)-2-(4-chlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)hexanenitrile
Chemical Class : Triazole fungicides
Molecular formula : C₁₅H₁₇ClN₄

2. Composition / Information on ingredients

Chemical Name	CAS#	Percent or content (w/w)
Myclobutanil	88671-89-0	90.00 %
Other ingredients	-	8.00 %

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

MATERIAL SAFETY DATA SHEET



Nagarjuna Agrichem Limited

Emergency Phone: 040 33605264

Plot No.12-A, 'C' Block, Lakshmi Towers,
Nagarjuna Hills, Punjagutta, Hyderabad- 500082.
Andhra Pradesh, INDIA

MYCLOBUTANIL TECHNICAL

MSDS No.: NACL T 3001

vomiting or give anything by mouth to an unconscious person. Take the person and product container to 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	203°F (95°C)

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.

MATERIAL SAFETY DATA SHEET



Nagarjuna Agrichem Limited

Emergency Phone: 040 33605264

Plot No.12-A, 'C' Block, Lakshmi Towers,
Nagarjuna Hills, Punjagutta, Hyderabad- 500082.
Andhra Pradesh, INDIA

MYCLOBUTANIL TECHNICAL

MSDS No.: NACL T 3001

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 over head 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 - 72°C
Boiling Point	390.8°C
pH	8 to 9
Vapour Pressure	1.98×10^{-1} Pa at 20°C
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

MATERIAL SAFETY DATA SHEET



Nagarjuna Agrichem Limited

Emergency Phone: 040 33605264

Plot No.12-A, 'C' Block, Lakshmi Towers,
Nagarjuna Hills, Punjagutta, Hyderabad- 500082.
Andhra Pradesh, INDIA

MYCLOBUTANIL TECHNICAL

MSDS No.: NACL T 3001

11. Toxicological Information

Acute Oral Toxicity	LD ₅₀ (Rats) 2500.86 mg/kg b.w
Acute Dermal Toxicity	LD ₅₀ (Rabbits) > 2,000 mg/kg b.w
Acute Inhalation	LC ₅₀ (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 LD ₅₀ (Bobwhite quail) 510 mg/kg bw Dietary LC ₅₀ (8 d, Bobwhite quail) >5000 mg/kg Dietary LC ₅₀ (8 d, mallard ducks) >5000 mg/kg
Fish	LC ₅₀ (96 h) for Rainbow trout 2.0 mg/l, Bluegill sunfish 4.4 mg/l
Bees	LD ₅₀ (oral) >171 µg/bee LD ₅₀ (contact) >200 µg/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

MATERIAL SAFETY DATA SHEET



Nagarjuna Agrichem Limited

Emergency Phone: 040 33605264

Plot No.12-A, 'C' Block, Lakshmi Towers,
Nagarjuna Hills, Punjagutta, Hyderabad- 500082.
Andhra Pradesh, INDIA

MYCLOBUTANIL TECHNICAL

MSDS No.: NACL T 3001

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	Xn	Harmful
Symbol	N	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

MATERIAL SAFETY DATA SHEET



Nagarjuna Agrichem Limited

Emergency Phone: 040 33605264

Plot No.12-A, 'C' Block, Lakshmi Towers,
Nagarjuna Hills, Punjagutta, Hyderabad- 500082.
Andhra Pradesh, INDIA

MYCLOBUTANIL TECHNICAL

MSDS No.: NACL T 3001

16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.

Revised date: 04.02.2014