

# MATERIAL SAFETY DATA SHEET



**NACL Industries Limited**  
(Formerly known as Nagarjuna Agrichem Limited)

## PROPICONAZOLE TECHNICAL 95%

### 1. Product and Company Identification

**Product Name** : Propiconazole Technical  
**Chemical Name** : (2RS,4RS;2RS,4SR)-1-[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole  
**Chemical Class** : Triazole  
**Molecular formula** : C<sub>15</sub>H<sub>17</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>2</sub>  
**Manufacturer** : NACL Industries Limited  
(Formerly known as Nagarjuna Agrichem Limited)  
Plot No.12-A, 'C' Block, Lakshmi Towers,  
Nagarjuna Hills, Punjagutta, Hyderabad- 500082.  
Telangana, INDIA  
Emergency Phone: 040 33605264

### 2. Composition / Information on ingredients

Chemical Name	CAS#	Percent or content (w/w)
Propiconazole	60207-90-1	95.00 %
Other ingredients	-	5.00%

### 3. Health Hazards Identification

**Toxicity** : This product is slightly hazardous  
**Inhalation** : Slightly toxic  
**Ingestion** : Slightly toxic  
**Skin** : Mild irritant  
**Eye** : Mild irritant  
**Sensitization** : Sensitizer

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### 4. First Aid Measures

<b>Eyes</b>	Hold eye open 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 for 15-20 minutes.
<b>Ingestion</b>	Give a large quantity of medical charcoal in plenty of water. Seek medical attention if a large column of concentrate was ingested.
<b>Inhalation</b>	Move person to fresh air. Give artificial respiration if required and call ambulance. Seek immediate medical assistance.

### 5. Fire Fighting Measures

<b>Fire</b>	Not expected to be a fire hazard
<b>Explosion</b>	None identified
<b>Suitable Extinguishing Media</b>	Use water fog, foam, CO2 to extinguish flames.
<b>Flammability Properties</b>	Non-flammable, product is combustible

### 6. Accidental Release Measures

<b>Personal precautions</b>	: Wear suitable protective clothing, shoes, gloves and goggle.
<b>In case of spill or leak</b>	: Control the spill at its source. Control 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 the entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent. Pickup 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.

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### 7. Handling and Storage

- Handling** : 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.
- Storage** : Keep tightly closed in original labeled container. Keep away from the reach of children. Keep away from foods, drinks and animals feeding stuffs.
- Suitable materials & Coatings** : Aluminum and Stainless steel.
- Loading & unloading Temperature** : Ambient
- Transport Temperature** : Ambient
- Specific use** : Use this product only for plant protection under outdoor conditions.

### 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.
- Eye protection** : Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an 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.

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### 9. Physical and Chemical Properties

<b>Appearance</b>	:	Yellowish Transparent amber colour liquid								
<b>Odour</b>	:	Musty odour								
<b>Melting Point</b>	:	23°C (glass transition temperature)								
<b>Boiling Point</b>	:	could not be determined since the test item was found to decompose without boiling								
<b>pH</b>	:	5.77								
<b>Vapour Pressure</b>	:	6.7 x10 <sup>-5</sup> Pa at 25°C								
<b>Water solubility</b>	:	<table border="1"><tr><td>Milli-RO water</td><td>0.160 g/L</td></tr><tr><td>pH 4.0 buffer</td><td>0.087 g/L</td></tr><tr><td>pH 7.0 buffer</td><td>0.151 g/L</td></tr><tr><td>pH 9.0 buffer</td><td>0.132 g/L</td></tr></table>	Milli-RO water	0.160 g/L	pH 4.0 buffer	0.087 g/L	pH 7.0 buffer	0.151 g/L	pH 9.0 buffer	0.132 g/L
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pH 4.0 buffer	0.087 g/L									
pH 7.0 buffer	0.151 g/L									
pH 9.0 buffer	0.132 g/L									
<b>Relative density</b>	:	1.2823 (20°C)								

### 10. Stability and Reactivity

<b>Chemical Stability</b>	stable material
<b>Hazardous Polymerization</b>	Will not occur
<b>Incompatibilities</b>	Not known

### 11. Toxicological Information

<b>Acute Oral Toxicity</b>	:	LD <sub>50</sub> (Rats) 300 - 2000 mg/kg body weight
<b>Acute Dermal Toxicity</b>	:	LD <sub>50</sub> (Rats) 2,000 mg/kg body weight
<b>Acute Inhalation (4 hr)</b>	:	LC <sub>50</sub> (rats): 5.13 mg / L air
<b>Eye Irritation</b>	:	Rabbit: Mild irritant
<b>Skin Irritant</b>	:	Rabbit: Mild irritant
<b>Skin Sensitization</b>	:	Guinea pig: Sensitizing

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### 12. Ecological Information

- Birds** : Acute oral LD<sub>50</sub> (Japanese quail) 2223 mg/kg body weight  
LC<sub>50</sub> (5 d, Japanese quail) >10,000 mg/kg diet  
Acute oral LD<sub>50</sub> (mallard ducks) >2510 mg/kg body weight  
LC<sub>50</sub> (5 d, mallard ducks) >5620 mg/kg diet
- Fish** : LC<sub>50</sub> (96 h) for Rainbow trout 4.3 mg/L,  
Carp 6.8 mg/L
- Bees** : LD<sub>50</sub> (oral & contact) >100 µg/bee  
LD<sub>50</sub> (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 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S  
Class : 9  
UN No. : 3082  
Packing Group : III

#### Sea (IMDG – Code)

- Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S  
Class : 9  
IMDG No. : 3082  
Packing Group : III  
Marine Pollutant : Yes

#### Air (ICAO/IATA)

- Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S

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Class : 9  
UN No. : 3082  
Packing Group : III

### 15. Regulatory Information

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

### 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.*