

DATE OF ISSUE: 12th June 2009

**BARMAC INDUSTRIES PTY LTD  
BOX FLAT ESTATE SWANBANK RD. SWANBANK Q 4306  
MATERIAL SAFETY DATA SHEET**

**PRODUCT NAME: BARMAC MANNI-PLEX Moly**  
**PHONE: (07) 3280 3000**  
**EMERGENCY AFTER HOURS NUMBER: (07) 3280 3000**

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Not classified as HAZARDOUS by Worksafe Australia Criteria

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**IDENTIFICATION**

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**OTHER NAMES: N/A**  
**USE: Liquid Molybdenum Micronutrient based fertilizer**  
**UN NUMBER: N/A**  
**HAZCHEM CODE: N/A**  
**DANGEROUS GOODS CLASS: N/A**  
**POISONS SCHEDULE: N/A**

**PHYSICAL DESCRIPTION/PROPERTIES**

**APPEARANCE:** Clear to light yellow  
**FLASHPOINT ( ° C):** N/A  
**BOILING POINT ( ° C):** N/A  
**FLAMMABILITY LIMITS (%):** N/A  
**VAPOUR PRESSURE (\_\_\_):** None  
**SOLUBILITY IN WATER (g/L):** Negligible  
**SPECIFIC GRAVITY:** N/A  
**pH:** 7.5-8.5

**HAZARDOUS INGREDIENTS:**

<b><u>CHEMICAL ENTITY</u></b>	<b><u>CAS NO</u></b>	<b><u>PROPORTION</u></b>
Sodium Molybdate, Na <sub>2</sub> MoO <sub>4</sub>	7631-95-0	12 - 14
Citric Acid, Anhydrous	77-92-9	4 - 8
Manni-Plex Package - Proprietary	N.A	5 - 15

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**HEALTH HAZARD INFORMATION**

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**HEALTH EFFECTS**

**Acute Effects:**

Eyes: Moderate irritant.

Skin: Slight irritant, especially from prolonged exposure. May cause redness, drying and cracking.

Ingestion: Moderate irritant. May cause nausea, abdominal discomfort, vomiting and diarrhea.

Inhalation: May cause irritation of nasal mucous membranes.

**Subchronic Effects:** None known.

**Chronic Effects:** None known.

**FIRST AID**

Eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or physician immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth and get medical attention.

**ADVICE TO DOCTOR:** Treat symptomatically.

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**PRECAUTIONS FOR USE**

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**EXPOSURE STANDARDS:** Threshold limit value for Sodium Molybdate: 5 mg/m<sup>3</sup> Citric Acid, Anhydrous: 15 mg/m<sup>3</sup>.

**ENGINEERING CONTROLS:** Ventilation recommended, but no TLV established.

**PERSONAL PROTECTION:**

Eyes: Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling.

Skin: Wear impervious clothes, waterproof gloves, shoes plus socks.

Respiratory: Not normally needed. If use generates a respiratory irritation, use NIOSH-approved dust/mist respirator (such as 3M #8710).

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**SAFE HANDLING INFORMATION**

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Storage: Store in original container only in a cool, well-ventilated, dry location. Keep away from strong acids. Do not store near food or feeds. Do not stack pallets more than two (2) high.

Transfer Equipment: Transfer product using chemical-resistant plastic tanks, pumps, valves, etc.

Work/Hygienic Practices: Keep out of reach of children. Harmful if swallowed. Avoid breathing of spray mists. Avoid contact with skin, eyes or clothing. Handlers must wear long-sleeved shirt and long pants, shoes plus socks, protective eyewear and particle mask. Wash with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

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**SPILLS & DISPOSAL**

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Do not contaminate lakes, streams, ponds, estuaries, oceans or other waters by discharge of waste effluents or equipment washwaters. Dispose of waste effluents in accordance with state and local waste disposal regulations. Also, chemical additions or other alterations of this product may invalidate any disposal information in this MSDS. Therefore, consult local waste regulators for proper disposal.

Containment: Prevent product spillage from entering drinking water supplies or streams.  
Clean Up: Collect and package for disposal.  
Evacuation: Not necessary.

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**FIRE FIGHTING MEASURES**

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Flash Point:	Does not flash.
Test Method:	Not applicable.
LEL Flammable Limits:	Not applicable.
UEL Flammable Limits:	Not applicable.
Autoignition Temperature:	Not applicable.
Flammability Classification:	Noncombustible.
Known Hazardous Products of Combustion:	Not known.
Properties that Initiate/Contribute to Intensity of Fire:	Not known.
Potential For Dust Explosion:	None.
Reactions that Release Flammable Gases or Vapors:	Not known.
Potential For Release of Flammable Vapors:	Not known.
Unusual Fire & Explosion Hazards:	None.
Extinguishing Media:	Carbon dioxide, chemical, foam, or water fog.
Special Firefighting Procedures:	Wear positive pressure, self-contained breathing apparatus and full protective clothing. Avoid smoke inhalation. Contain any

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liquid runoff.

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**STABILITY AND REACTIVITY**

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Stability:	Stable.
Conditions To Avoid:	None.
Incompatibility:	Strong acids.
Hazardous Decomposition Products:	Neutralization reaction will occur if exposed to acidic materials. Burning may result in formation of carbon monoxide, molybdenum oxides when heated to decomposition.
Hazardous Polymerization:	Will not occur.

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NOTICE: Information for this product is believed to be reliable, however buyer and user assume all risk of use, handling and storage whether in accordance with directions or not. Barmac Industries Pty Ltd and its agents give no guarantee or warranty of any kind express or implied concerning the use of this product and will not accept any responsibility whatsoever whether in contract or tort for any loss including consequential loss arising out of the use of this product or caused by this product.

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