

DATE OF ISSUE 8<sup>TH</sup> April 2009

**BARMAC INDUSTRIES PTY LTD  
BOX FLAT ESTATE SWANBANK RD. SWANBANK Q 4306**

**MATERIAL SAFETY DATA SHEET**

**PRODUCT NAME: BARMAC BORIC ACID**

**PHONE: (07) 3280 3000**

**EMERGENCY AFTER HOURS NUMBER: (07) 3280 3000**

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Classified as hazardous by Worksafe Australia Criteria

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**IDENTIFICATION**

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**OTHER NAMES:** Boracic Acid, Orthoboric acid

**UN NUMBER:** N/A

**USE:** Micro nutrient for Agriculture, Horticulture & Hydroponics

**HAZCHEM CODE:** N/A

**DANGEROUS GOODS CLASS:** N/A

**POISONS SCHEDULE:** 5

**PHYSICAL DESCRIPTION/PROPERTIES**

**APPEARANCE:** White translucent crystals

**FLASHPOINT ( ° C):** N/A

**BOILING POINT ( ° C):** N/A

**FLAMMABILITY LIMITS (%):** N/A

**VAPOUR PRESSURE (\_\_\_):** N/A

**SOLUBILITY IN WATER (g/L):** soluble

**SPECIFIC GRAVITY:** 1.51

**FORMULA:** BH3O3

**INGREDIENTS**

**CHEMICAL ENTITY**

Boric Acid

**CAS NO.**

10043-35-3

**PROPORTION**

99 %

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**HEALTH HAZARD INFORMATION**

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**HEALTH EFFECTS**

**ACUTE:**

**SWALLOWED:** Ingestion could result in nausea, vomiting, diarrhoea, drowsiness, rash, headache, fall in body temperature, low blood pressure, real injury, cyanosis, coma and death. Adult fatal dose reported at 5 to more than 30 grams.

**EYES:** May cause redness and irritation of eyes and pain.

**SKIN:** Causes skin irritation. May be absorbed through damaged or abraded skin in harmful amounts. Not significantly absorbed through intact skin.

**INHALED:** Causes irritations of the mucous membranes of the respiratory tract. May be absorbed from the mucous membranes and depending on the amount of exposure could result in the development of nausea, vomiting, diarrhoea, drowsiness, rash, headache, fall in body temperature, low blood pressure, real injury, cyanosis, coma and death.

Oral LD50 Rat	2660mg/Kg
Oral LD50 Rat	3500-4100mg/Kg
Oral LD50 Mouse	3500-4100mg/Kg
Oral LDLo Woman	200mg/kg
Dermal LD50 Rabbit	>2000mg/Kg inhalation
Inhalation LC50 rat	>2.0mg/L

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**FIRST AID**

**SWALLOWED:** Immediately rinse mouth with water.ater to drink provided person is conscious. Do not induce vomiting. Seek immediate medical attention.

**EYES:** If in eyes irrigate with water for 15 minutes while holding eyelids open and see a doctor.

**SKIN:** If on skin wash with soap and water. Remove contaminated clothing.

**INHALED:** Exposure to dust or spray solution may cause acute irritation, which may worsen with increased temperature. Symptoms include nasal irritation, coughing and come chest discomfort. Remove victim from exposure to fresh air. If not breathing, apply arterficial respiration. If breathing is difficult, give oxygen.

**FIRST AID FACILITIES:** N/A

**ADVICE TO DOCTOR:** Treat symptomatically based on individual reactions of patient and judgement of doctor. Observation is only required for adult ingestion in the range of 4-8 grams of boric acid. For ingestion of larger amounts, maintain adequate kidney function and force fluids. Gastric lavage is recommended for symptomatic patients only. Haemodialysis should be reserved for massive acute ingestion or patients with renal failure.

**PRECAUTIONS FOR USE**

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**EXPOSURE STANDARDS:** The following exposure is recommended by Worksafe Australia: Borates, tetra, sodium salts: TWA 1 mg/m3.

**ENGINEERING CONTROLS:** A system of local and/or general exhaust is recommended to keep employee exposures as low as possible.

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**PERSONAL PROTECTION:** Wear an approved air purifying respirator where engineering controls are inadequate. Wear chemical splash goggles, impervious gloves, long sleeved protective clothing and safety footwear.

**FLAMMABILITY:** Material is non flammable and non explosive.

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**SAFE HANDLING INFORMATION**

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**STORAGE AND TRANSPORT:** Store in a cool, dry, well ventilated area. Keep containers tightly closed when not in use. Protect against physical damage. Store away from incompatible materials including strong reducing agents, base metals, potassium, acetic anhydride, alkalis, carbonates, hydroxides and sources of ignition. Protect from direct sunlight and moisture. Protect from humidity. Store under cool to warm conditions (2-40C). This product is not classified as dangerous for transport according to the Australian code for the transport of dangerous goods by road and rail.

**SPILLS AND DISPOSAL:** For Land spills, Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Dispose of as hazardous waste. Advise local authorities if waterway contamination occurs.

**FIRE/EXPLOSION HAZARD:** Material is non flammable and non explosive. Firefighters should wear a positive pressure self contained breathing apparatus.

Risk Phrases:

R60 May impair fertility

R61 May cause harm to the unborn child

Safety Phrases

S53 Avoid exposure – obtain special instructions before use.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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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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