

Section 1: Identification of the Material and Supplier

Product Name: Ice Bank Descaler

Other Names: Aqueous solution containing aminotri- (methylenephosphonic acid).

Proper shipping name (ADG Code): Corrosive liquid, n.o.s.(aminotri(methylenephosphonic acid))

Recommended use: To remove scale from ice banks. Use as directed on the product label.

Supplier: **Bracton Industries (NSW) Pty. Ltd.,**
ACN: 003 060 160
50 Chard Road, BROOKVALE NSW 2100, Australia
Tel: +61 2 9938 1800 (business hours)
Fax: +61 2 9905 0979

Emergency Phone Numbers:

Transport/Fire Emergency: **000** (Emergency services)

Medical Emergency: **131126** (Poisons Information Centre)

Section 2: Hazards Identification

Hazardous according to criteria of Worksafe Australia.

Dangerous Goods.

Risk Phrases: R: 34 Causes burns.

Safety Phrases:

S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S: 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S: 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Section 3: Composition/Information on Ingredients

Ingredients:

Aminotri(methylenephosphonic acid)	[6419-19-8]	10 - 30 %
Other ingredients deemed not to be hazardous	<	10 %
Water	[7732-18-5]	to 100 %

Section 4: First Aid Measures

For advice, contact a Poisons Information Centre (Phone 131 126) or a doctor.

Swallowed: If swallowed, do NOT induce vomiting.

Skin: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Eyes: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure.

First Aid facilities:

Recommended: Eye wash. Hand wash basin. Emergency shower if handling industrial quantities.

Advice to Doctor:

Product is an aqueous solution of an organic phosphonic acid. Corrosive irritant to living tissue. Risk of serious eye damage. Contact Poisons Information Centre.

Aggravated medical conditions:

No data found.

Section 5: Fire Fighting Measures

HAZCHEM Code: 2 X

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Water vapour, oxides of carbon, oxides of nitrogen, oxides of phosphorus.

Protective Equipment: Full protective clothing including breathing apparatus and protective gloves.

Section 6: Accidental Release Measures

Emergency Procedures: Contain. Prevent spillages from entering natural waters.

For large spills: Contain spillage using sand or earth. Transfer liquid and solids to suitable container. Treat residues as for small spillage.

For small spills: Spills may be neutralised by liberal application of soda ash. If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise absorb on inert absorbent, transfer to suitable container and arrange removal by disposals company. Wash site of spillage thoroughly with water and detergent.

Section 7: Handling and Storage

Precautions for safe handling:

Avoid contact with skin and eyes. Keep away from alkalis.

Conditions for safe storage:

Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a bonded dangerous goods store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from alkalis. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Alkalis.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA: None assigned.

ES-STEL: None assigned.

ES-PEAK: None assigned.

Notations: None.

Biological Limit Values: No data found.

Engineering Controls:

Avoid using mild steel as a material of construction. Ensure adequate ventilation (same as outdoors) when using. If handling industrial quantities or if aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible.

Personal Protective Equipment:

Avoid contact with skin and eyes. Personal protection to be selected from those recommended below, as appropriate to mode of use, quantity handled and degree of hazard:-

Normal Use:

Eye/face protection
Gloves, rubber or plastic.

Industrial Quantities:

Face shield or safety glasses
Gloves, rubber or plastic
Plastic apron, sleeves and boots
Impervious overalls.

Section 9: Physical and Chemical Properties

Appearance: Clear, slightly coloured, mobile liquid.
Odour: Very slight, aromatic odour.
pH: < 2
Vapour Pressure: 23 hPa @ 20 °C [water]
Vapour Density: No data.
Boiling Point: > 100 °C
Melting Point: No data.
Volatiles: About 72 % [water]
Volatile Organic Compounds (VOC): < 1 %
Evaporation Rate: No data.
Solubilities: Miscible with water in all proportions.
Specific Gravity/Density: About 1.15 g/mL @ 20 °C
Flash Point: None.
Flammable Limits: None.
Dust Explosion: Not applicable.
Auto-ignition Temperature: No data.

Other Information:

Acid mixture. May react vigorously or violently with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide, a simple asphyxiant. Corrosive to mild steel. Slippery when spilled.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Incompatible materials.
Incompatible Materials: Alkalis, mild steel.
Hazardous Decomposition Products: Oxides of nitrogen, oxides of phosphorus.
Hazardous Reactions: May react vigorously or violently with alkalis.

Section 11: Toxicological Information

Health Effects:

No data available for the mixture. Information presented relates to individual ingredients.

Acute:

Swallowed: May cause burns to mouth, throat and epigastrium. May cause gastric upset, nausea, vomiting and possible diarrhoea. May cause cardiac disturbances.

Skin: Irritating to skin. The concentrate may cause burns.

Eyes: Corrosive irritant. May cause redness, irritation and pain. Risk of chemical conjunctivitis and corneal burns.

Inhaled: An unlikely route owing to the low volatility of ingredients. Inhalation of aerosols or spray/mist may cause irritation to the upper respiratory tract, cardiac disturbances and central nervous system effects

such as vertigo, anxiety, depression, and muscle incoordination and emotional instability. Overexposure may lead to pulmonary oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.

Chronic: Repeated skin contact may lead to irritation and burns.

LD50: Aminotri(methylenephosphonic acid) 2,100 mg/kg oral, rat.

Section 12: Ecological Information

Ecotoxicity: May be harmful to aquatic organisms.

Persistence and degradability: No data.

Mobility: Readily transported by water.

Environmental Fate: No data.

Bioaccumulative potential: No data.

Other adverse environmental effects: Contains phosphonic acids. May contribute to the formation of algal bloom in natural waters.

Section 13: Disposal Considerations

The generator of any wastes from this product is responsible for its proper classification, transport and disposal. Consult appropriate local and State regulations.

Disposal methods and containers:

Avoid disposal to natural waters or the environment. Do not use mild steel containers.

Special precautions for landfill or incineration:

Unsuitable for incineration. May not be suitable for some landfill sites.

Section 14: Transport Information

UN Number: UN 1760

UN Proper shipping name: Corrosive liquid, n.o.s. (aminotri(methylenephosphonic acid))

Class and subsidiary risk: 8 Corrosive.

Packaging group: III

Special precautions for user: Do not store or transport with dangerous goods of classes 1, 4.3, 5.1, 5.2, 7, alkalis, foodstuffs or foodstuff empties. Contain spillages.

HAZCHEM Code: 2 X

Material for export: Regulated. Refer to IMO/IMDG and IATA/ICAO.

Section 15: Regulatory Information

Poisons (SUSDP): Not a scheduled poison.

Dangerous Goods: Yes. UN 1760 8/III 2 X.

Carcinogen: Australia IARC NTP

No. No. No.

Agricultural and Veterinary Chemicals Act: Not applicable.

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data.

Section 16: Other information

Date of MSDS preparation: August 2006

Disclaimer

The information herein is to the best of our knowledge, correct and complete. It describes the safety requirements for this product and should not be construed as guaranteeing specific properties. Since methods and conditions are beyond our control we do not accept liability for any damages resulting from the use of, or reliance on, this information in inappropriate contexts.