



Section 1: Identification of the Material and Supplier

Product Name: Boumatic Premium Acid

Other Names: Aqueous solution of mixed acids.

Proper shipping name (ADG Code): Corrosive liquid, acidic,
inorganic, n.o.s.
(sulphuric acid, phosphoric acid)

Recommended use: As an acidic cleaning solution.
Use as directed on the product label.

Supplier: DASCO Pty. Ltd.,
ABN: 14 004 581 113
24 - 26 Helen Street, HEIDELBERG HEIGHTS VIC 3081
Tel: (03) 9459 7004 (business hours)
Fax: (03) 9459 9200

Emergency Phone Numbers:
Transport/Fire Emergency: 000 (Emergency services)
Medical Emergency: 131126 (Poisons Information Centre)

Section 2: Hazards Identification

Classified as hazardous according to criteria of Worksafe Australia.

Dangerous goods.

Risk Phrases: R: 35 Causes severe burns.

Safety Phrases: S: 1/2 Keep locked up and out of the reach of children.
S: 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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:

Phosphoric acid	[7664-38-2]	10 - 30 %
Sulphuric acid (98 %)	[7664-93-9]	< 10 %
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 Center or a doctor, or for at least 15 minutes.

Inhaled: Remove from exposure, rest and keep warm. Seek medical advice.

First Aid facilities:

Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

Advice to Doctor:

Product is a aqueous solution of sulphuric acid and phosphoric acid, containing a very low proportion of a low-foaming surfactant. Causes severe burns. 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: Oxides of sulphur, oxides of phosphorus, water vapour.

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

Section 6: Accidental Release Measures

Emergency Procedures:

Contain.

For large spills:

Contain spillage using sand or earth. Transfer both liquids and solids to suitable container. Treat residues as for small spillages.

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.

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 (including carbonates and bicarbonates), metals, wood and paper products. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Alkalis, metals, wood and paper products.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA:	Sulphuric acid	1 mg/m ³
	Phosphoric acid	1 mg/m ³
ES-STEL:	Sulphuric acid	3 mg/m ³
	Phosphoric acid	3 mg/m ³
ES-PEAK:	None assigned.	
Notations:	None assigned by NOHSC, but see:	
	Sulphuric acid	[skin] (Finland, Russia)

[Skin] indicates that this material may be absorbed via unbroken skin, and any such contact may invalidate the TLV.

Biological Limit Values: No data found.

Engineering Controls:

Avoid using active metals (such as aluminium, tin, zinc) or wood and wood products as materials of construction. Ensure adequate ventilation (same as outdoors) when using. If handling industrial quantities, or if vapour/aerosol risk exists, consider local mechanical exhaust/extraction to keep airborne contamination as low as possible, and at least below the TLVs.

Personal Protective Equipment:

Avoid contact with skin and eyes. Avoid breathing vapours or aerosols. 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, red liquid.
Odour: Almost odourless.
pH: About 1: very acidic, even when diluted.
Vapour Pressure: No data.
Vapour Density: No data.
Boiling Point: > 100 °C
Melting Point: No data.
Volatiles: About 70 % [water]
Volatile Organic Compounds (VOC): Nil.
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:

Very acidic mixture. Will react vigorously or violently with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide, a simple asphyxiant. May attack reactive metals, such as aluminium, tin, zinc and galvanised iron, generating hydrogen, a flammable gas. Will attack wood and paper products. Slippery when spilled.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials.

Incompatible Materials: Alkalis, active metals, wood and paper products.

Hazardous Decomposition Products: Oxides of sulphur, oxides of phosphorus.

Hazardous Reactions: Reacts vigorously or violently with alkalis. Contact with carbonates or bicarbonates will generate carbon dioxide. Contact with active metals may generate hydrogen.

Section 11: Toxicological Information

Health Effects:

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

Acute:	Swallowed:	Corrosive. May cause severe burns. May be fatal. Can cause burns to the mouth, throat and stomach, abdominal pains, a burning sensation, sore throat, an intense thirst, vomiting and diarrhoea. Large doses may cause clammy skin, weak and rapid pulse, shallow respiration, scanty urine and circulatory collapse.
	Skin:	Corrosive. May cause redness, pain and serious skin burns. Extensive exposure may cause symptoms similar to when swallowed.
	Eyes:	Corrosive. Risk of serious eye damage. May cause redness, pain, severe deep burns, blurred vision, irreversible eye damage with possible total loss of sight.
	Inhaled:	Aerosols may cause irritation of the nose and throat, cough, laboured breathing and a burning sensation. Prolonged exposure may cause nose bleeds, nasal congestion, chest pain and bronchitis. Inhalation of aerosols may cause pulmonary oedema (fluid in the lungs). Onset of symptoms may be delayed.
Chronic:		Chronic exposure to sulphuric acid fumes/aerosols may lead to perforation of the nasal septum, erosion of the teeth, kidney and lung damage. Chronic exposure to sulphuric acid mists may be a cancer risk. (1) Chronic exposure to phosphoric acid may affect the liver, blood and bone marrow.
LD50:	Sulphuric acid	2,140 mg/kg oral, rat.
	Phosphoric acid	1,530 mg/kg oral, rat.
LC50:	Sulphuric acid	510 mg/m ³ /2 hours, rat. 320 mg/m ³ /2 hours, mouse.
	Phosphoric acid	> 850 mg/m ³ /1 hour, rat.
LDLo:	Sulphuric acid	135 mg/kg unreported route, man.
	Phosphoric acid	220 mg/kg unreported route, man.
TCLo:	Sulphuric acid	3 mg/m ³ /24 weeks, human - changes to teeth and supporting structures. 1 mg/m ³ /3 hours, human - unspecified changes to lungs, thorax or respiration.

Section 12: Ecological Information

Ecotoxicity:	Harmful to aquatic organisms.
Persistence and degradability:	No data.
Mobility:	Readily transported by water.
Environmental Fate:	Will be converted to inorganic phosphates and sulphates in the environment.
Bioaccumulative potential:	No data.
Other adverse environmental effects:	Contains a surfactant. Local concentrations will be harmful to aquatic organisms, including fish. Phosphates in natural waters will contribute to the formation of algal blooms.

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 drains, natural waters or the environment.
Do not use metal containers.

Special precautions for landfill or incineration:

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

Section 14: Transport Information

UN Number:	UN 3264
UN Proper shipping name:	Corrosive liquid, acidic, inorganic, n.o.s. (sulphuric acid, phosphoric acid)
Class and subsidiary risk:	8 Corrosive.
Packaging group:	II
Special precautions for user:	Do not store or transport with dangerous goods of classes 1, 4.3, 5.1, 5.2, 6 (if cyanides), 7, 8 (if alkalis), foodstuffs and 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): *Schedule 6* *Sulphuric acid > 0.5 %*

Dangerous Goods: Yes. UN 3264 8/II 2 X.

Carcinogen: **Australia** **IARC** **NTP** **RTECS**
No. Yes (1) No. No.

Agricultural and Veterinary Chemicals Act:

This product is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

Australian Inventory of Chemical Substances (AICS): Listed.

Other National/International Regulations: No data found.

Section 16: Other information

Date of MSDS update: September 2009
Complete review and re-write of all sections.

Abbreviations:

NOHSC - National Occupational Health and Safety Commission.
ACGIH - American Conference of Governmental Industrial Hygienists.
MAK - Maximum workplace concentration - Germany,
(*maximale Arbeitsplatzkonzentration*)
IARC - International Agency for Research on Cancer (France).
NTP - National Toxicology Program (USA).
RTECS - Registry of Toxic Effects of Chemical Substances.

Literature references:

(1) *IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man. v.54, p.41, 1992.*

Available Sources of Data:

National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [2011(2003)] - NOHSC.
Australian Dangerous Goods Code.
Standard for the Uniform Scheduling of Drugs and Poisons - AHMAC.
Exposure Standards for Atmospheric Contaminants in the Occupational Environment [1003]- NOHSC.
List of Designated Hazardous Substances [10005] - NOHSC.
Merck Index - Merck Inc.
Sax's Dangerous Properties of Industrial Materials - Lewis.
Handbook of Toxic and Hazardous Chemicals and Carcinogens - Sittig.
Handbook of Reactive Chemical Hazards - Bretherick.
Hawley's Condensed Chemical Dictionary - Wiley Interscience.
AUSREG's Chemical Data Package for PCs - AUSREG Consultancy.