



Material Safety Data Sheet

Section 1: Identification of the Material and Supplier

Supplier: Bracton Industries (NSW) Pty. Ltd., ACN: 003 060 160
Address: 50 Chard Road, BROOKVALE NSW 2100, Australia
Tel: +61 2 9938 1800 (business hours)
Fax: +61 2 9905 0979
Product Name: DP1
Other Names: Liquid Beer Line Cleaner, Glass & Dishwashing Machine Detergent.
Proper shipping name (ADG Code): Caustic alkali liquid, n.o.s. (potassium hydroxide, disodium trioxosilicate)
Recommended use: As one part of a two-part beer line cleaner. Use diluted as directed on the product label.
Emergency Phone Numbers: Transport/Fire Emergency:000 Medical Emergency: 131126

Section 2: Hazards Identification

Hazardous according to criteria of Worksafe Australia. Dangerous Goods.

Risk Phrases:

R: 22 Harmful if swallowed.

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: 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: Potassium hydroxide	[1310-58-3]	30 - 60 %
Sodium metasilicate pentahydrate	[10213-79-3]	< 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 131126) 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.

First Aid facilities: Mandatory: Eye wash. Hand wash basin.

Recommended: Emergency shower if handling industrial quantities.

Advice to Doctor: Product is a caustic solution containing a high proportion of potassium hydroxide. Causes severe burns. Risk of serious eye damage. If swallowed, may cause holes in the stomach and intestines; gastric lavage may be contraindicated. Contact Poisons Information Centre. **Aggravated medical conditions:** No data found.

Section 5: Fire Fighting Measures

HAZCHEM Code: 2 R **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 potassium and sodium.

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

Section 6: Accidental Release Measures

Emergency Procedures: Dilute. 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: 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: Prevent contact with skin and eyes. Keep away from acids and active metals.

Conditions for safe storage: Store in a cool, well ventilated place, out of reach of children. Large quantities should be stored in a banded dangerous goods store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from acids, active metals, ammonium compounds. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles: Acids, ammonium compounds, active metals (such as aluminium, tin, zinc), organic halogen compounds, organic nitro compounds, wood and paper.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards: **ES-TWA:** Potassium hydroxide 2 mg/m³ **ES-STEL:** None assigned.

ES-PEAK: Potassium hydroxide 2 mg/m³ **Biological Limit Values:** No data found.

Engineering Controls: Do not use aluminium, tin, zinc or galvanised iron, wood or wood products as materials 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, and at least below the TLV.

Personal Protective Equipment: Prevent 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, rubber / nitrile or PVC gloves, boots.

Industrial Quantities: Face shield or safety glasses, gloves, rubber or plastic apron, sleeves, boots, impervious overalls.

Section 9: Physical and Chemical Properties

Appearance: Clear, colourless, mobile liquid.

Odour: Almost odourless.

pH: 14 Very alkaline.

Vapour Pressure: About 23 hPa @ 20 °C [water]

Vapour Density: No data.

Boiling Point: > 100 °C

Melting Point: < 0 °C

Volatiles: About 38 %

VOC: Nil.

Evaporation Rate: No data.

Solubilities: Miscible with water in all proportions.

Specific Gravity: 1.5 g/mL @ 20 °C

Flash Point: None.

Flammable Limits: None.

Dust Explosion: Not applicable.

Auto-ignition Temperature: No data.

Other Information: Very alkaline mixture. Will react vigorously or violently with acids and acidic salts. Contact with ammonium compounds may generate ammonia, a toxic gas. Contact with active metals (such as aluminium, tin, zinc) may generate hydrogen, a flammable gas. May react with organic halogen compounds, especially trichloroethylene, causing fire or explosion. Contact with organic nitro compounds may form shock-sensitive products. Will attack wood and wood products. May attack glass on prolonged contact. Slippery when spilled.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Incompatible materials.

Incompatible Materials: Acids, active metals, ammonium compounds, nitro compounds, organic halogen compounds, wood and wood products.

Hazardous Decomposition Products: Oxides of potassium and sodium.

Hazardous Reactions: Will react vigorously or violently with acids. Contact with active metals may generate hydrogen. Contact with ammonium compounds may generate ammonia. May cause fire or explosion with organic halogen compounds. May form shock-sensitive salts with organic nitro compounds.

Section 11: Toxicological Information

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

Acute: **Swallowed:** Corrosive, causes severe burns. Causes a burning sensation, abdominal pain, violent pain in the throat and epigastrium, haematemesis, collapse. May cause chemical burns to the mouth, throat and gastrointestinal system. May cause ulceration and bleeding, and/or holes in the stomach and intestines. If not immediately fatal, stricture of oesophagus may result.

Skin: Corrosive. May cause redness, pain and severe, deep burns.

Eyes: Corrosive. May cause redness, pain, blurred vision and deep burns. May cause immediate severe burns which may result in permanent loss of sight.

Inhaled: Aerosols may cause irritation, a burning sensation, sneezing, cough, laboured breathing, sores in the nose.

Chronic: Repeated low level skin contact may lead to dermatitis.

LD50: Potassium hydroxide 273 mg/kg oral, rat. Sodium metasilicate 1,153 mg/kg oral, rat. 770 mg/kg oral, mouse.

Section 12: Ecological Information

Ecotoxicity: Harmful to aquatic organisms.

Persistence and degradability: No data.

Mobility: Readily transported by water.

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 aluminium, tin- or zinc-lined 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 1719
UN Proper shipping name: Caustic alkali liquid, n.o.s. (potassium hydroxide, disodium trioxosilicate)
Class and subsidiary risk: 8 Corrosive. **Packaging group:** II
Special precautions for user: Do not store or transport with other dangerous goods of classes 1, 4.3, 5.1, 5.2, 7, 8 (acids), foodstuffs and foodstuff empties.
HAZCHEM Code: 2 R **Material for export:** Regulated. Refer to **IMO/IMDG** and **IATA/ICAO**.

Section 15: Regulatory Information

Poisons (SUSDP): S6 Potassium hydroxide > 5 % **Dangerous Goods:** Yes. UN 1719 8/II 2 R.
Australian Inventory of Chemical Substances (AICS): Listed.

Section 16: Other information

Date of MSDS update: April 2011