



Section 1: Identification of the Material and Supplier

Product Name: Boumatic Kleenline

Other Names: Aqueous solution containing sodium hydroxide and sodium hypochlorite.

Proper shipping name (ADG Code): Corrosive liquid, n.o.s.
(sodium hydroxide, sodium hypochlorite)

Recommended use: As an alkaline, chlorinated pipeline cleaner.
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: 37/39 Wear suitable 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:

Sodium hydroxide	[1310-73-2]	10 - 30 %
Sodium hypochlorite	[7681-52-9]	< 10 %
Other ingredients deemed not to be hazardous		< 10 %
Water	[7732-18-5]	to 100 %
Available chlorine	[7782-50-5]	about 3.5 %

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 an aqueous solution containing a moderate proportion of sodium hydroxide, and a low proportion of sodium hypochlorite. Corrosive to living tissues. Risk of serious eye damage. If swallowed, may cause holes in 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 X

Evacuate: No.

Extinguishant: Water fog or fine water spray.

Risk of violent reaction or explosion: No.

Products of combustion: Chlorine, hydrogen chloride, oxides of carbon, water vapour.

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

Section 6: Accidental Release Measures

Emergency Procedures:

Increase ventilation.
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:

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.
Do not breathe fumes or aerosols.
Keep away from acids, 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 bonded dangerous goods store. Store in original container. Keep container tightly closed and out of direct sunlight. Keep away from acids, active metals (such as aluminium, tin, zinc), ammonium compounds, oxidising agents, flammable liquids, organic halides, nitro products, wood and paper products. Protect from physical damage. Clean up all spills and splashes promptly; avoid secondary accidents.

Incompatibles:

Acids, oxidising agents, metal salts, active metals, ammonium compounds, nitro compounds, organic halides, flammable liquids, wood and paper products.

Section 8: Exposure Controls/Personal Protection

National Exposure Standards:

ES-TWA:	Sodium hydroxide	3 mg/m ³
	Chlorine	1 ppm, 3 mg/m ³
ES-STEL:	None assigned.	
ES-PEAK:	Sodium hydroxide	3 mg/m ³
	Chlorine	1 ppm, 3 mg/m ³

Notations: None.

[Peak] indicates a ceiling concentration which should not be exceeded, even momentarily.

Biological Limit Values: No data found.

Engineering Controls:

Avoid using active metals (such as 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 vapour/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:

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, yellow-green liquid.
Odour: Slight smell of chlorine bleach.
Odour threshold (chlorine): About 0.3 ppm.
pH: About 14 - Very alkaline.
Vapour Pressure: No data.
Vapour Density: No data.
Boiling Point: > 100 °C
Melting Point: No data.
Volatiles: > 75 % [water]
Volatile Organic Compounds (VOC): Nil.
Evaporation Rate: No data.
Solubilities: Miscible with water in all proportions.
Specific Gravity/Density: About 1.22 g/mL @ 20 °C
Flash Point: None.
Flammable Limits: None.
Auto-ignition Temperature: No data.

Other Information:

Very alkaline solution. Will react vigorously or violently with acids, generating chlorine, a toxic gas. Corrosive to active metals (such as aluminium, tin, zinc) generating hydrogen, a flammable gas. May absorb carbon dioxide from the air. Will attack wood and paper products. May form shock-sensitive products with nitro compounds. Contact with ammonium compounds may generate ammonia, a toxic gas. 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, metal salts, ammonium compounds, nitro compounds, organic halides, wood and paper products.

Hazardous Decomposition Products: Chlorine, hydrogen chloride.

Hazardous Reactions: Vigorous or violent reaction with acids, generating chlorine. Corrosive to active metals, generating hydrogen. Contact with ammonium compounds may generate ammonia. May form shock-sensitive products with 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. May be fatal. May cause burns in the mouth and throat, nausea, vomiting, abdominal pains and diarrhoea (occasionally bloody), fall in blood pressure, heart failure, coma and death. May cause swelling of the larynx and subsequent suffocation. May cause perforation of the stomach and intestines, and the sites of subsequent scarring have been associated with stomach cancer formation. Damage may not become evident for several days, but may still be fatal.
	Skin:	Corrosive, may cause severe, deep burns. Mists and vapours may cause small burns. Symptoms may include redness, pain and skin burns.
	Eyes:	Corrosive. Contact with the eyes may rapidly cause severe damage to the tissues, redness, pain and blurred vision. May cause severe, deep burns and permanent impairment to, or even total loss of, sight.
	Inhaled:	Inhalation of aerosols or mists may cause damage to the upper respiratory tract and lungs. Effects may range from mild irritation of the mucous membranes to severe pneumonitis (inflammation and damage to lung tissues). May cause cough, a burning sensation, laboured breathing, sneezing, sore throat and runny nose. May cause oedema (fluid build-up in the lungs). Onset of symptoms may be delayed.
Chronic:		Prolonged or repeated slight skin exposure may cause dermatitis. Sodium hypochlorite has been classified by IARC as group 3; unclassifiable as to carcinogenicity to man. (1)
LD50:	Sodium hydroxide	40 mg/kg i.p., mouse.
	Sodium hypochlorite	5,800 mg/kg oral, mouse.
LDLo:	Sodium hydroxide	500 mg/kg oral, rabbit.
TDLo:	Sodium hypochlorite	1,000 mg/kg oral, woman - general depressed activity, lowered blood pressure, skin burns. (2)

(i.p.: intraperitoneal)

Section 12: Ecological Information

Ecotoxicity:	Harmful to aquatic organisms.
Persistence and degradability:	No data found.
Mobility:	Readily transported by water.
Environmental Fate:	No data.
Bioaccumulative potential:	No data.
Other adverse environmental effects:	No data.

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 1760
UN Proper shipping name:	Corrosive liquid, n.o.s. (sodium hydroxide, sodium hypochlorite)
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, 7, 8 (acidic), foodstuffs and foodstuff empties. Contain spillages.
HAZCHEM Code:	2 X
Material for export:	Regulated. Refer to IMO\IMDG and IATA\ICAO .

