

MATERIAL SAFETY DATA SHEET

AUSTRALIA:

Hammersley Products (Aust) Pty Ltd ACN 001 621 281

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**Hazardous according to the criteria of Worksafe Australia.**

I IDENTIFICATION

Product Name: **CHEMSTEAM**

Other Names: Proper Shipping Name is CORROSIVE LIQUID ACID INORGANIC N.O.S.

Product Code: None.

UN No: 3266 **Hazchem Code:** 2X

Dangerous Goods Class: 8 Corrosive Substances.

Sub Risk Class: None allocated.

Packaging Group: III - Most EPGs may now be substituted by the Initial Emergency Response Guide, available from Standards Australia.

Poison Schedule: S6

Chemical Family: Water solution of ingredients (see below).

Uses: Industrial steam cleaning additive.

Physical Appearance & Properties

Appearance & Odour: Clear, brown alkaline liquid with slight odour.

Melting/softening point: Approximately 0°C.

Boiling point and vapour pressure: Approximately 102°C at 100kPa.

Volatile materials: Water component.

Flashpoint: Does not burn.

Specific gravity: 1.18

Solubility in water: Completely soluble.

Corrosiveness: Corrosive. pH 13.5

Ingredients	Chemical Entity	CAS No	Proportion, %	Worksafe Exposure Limits	
				TWA, mg/m ³	STEL, mg/m ³
	Sodium hydroxide	1310-73-2	10	2	Peak
	Other non hazardous ingredients	secret	10-20	not set	not set
	Water	7732-18-5	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

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II HEALTH HAZARD DATA

Health Effects:

No specific data is available for the product for chronic exposure symptoms. The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

Acute Effects:

- Swallowed: Data suggests that this product is corrosive to the gastrointestinal tract. Will cause burning to mouth and throat, possible irreversible problems, even death unless treated promptly.
- Eye: This product is corrosive to the eyes. It will quickly cause intense discomfort such as severe pain, copious watering and redness of the eyes. Unless quickly treated, corrosive effects leading to permanent corneal damage, even blindness will occur.
- Skin: This product is corrosive to skin. It will cause effects such as severe itchiness, blistering and skin reddening and death of skin tissues. Exposure may lead to permanent damage including scarring.
- Inhalation: Data suggests that this product should present no significant problems to typical persons if used as intended.

First Aid:

Eyebaths or eyewash stations should be provided where this product is being used.
If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia.
If swallowed, do NOT induce vomiting. Give a glass of water.
If skin contact occurs, remove contaminated clothing and wash skin thoroughly.
If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

- Eyes: If this product comes into contact with eyes, hold open and wash with running water. Do not try to remove contact lenses unless trained. Seek immediate medical attention.
- Skin: If product gets on skin, immediately remove contaminated clothing and wash skin with soap and running water for at least 15 minutes. Seek immediate medical attention if skin blisters, or if it looks or feels unusual. If safety shower is available, use it promptly. If you have the time and resources, see if you can neutralise the corrosive medium, especially if on face, in eyes or in/on other sensitive areas.
- Inhalation: No first aid measures normally required. However, if vapours or mists have been inhaled, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.
- Advice to Doctor: Treat symptomatically. Note the nature of this product.

III PRECAUTIONS FOR USE

Risk Phrases are: R34, R41. Causes burns. Risk of serious damage to eyes.

Exposure Standards:

A time weighted average (TWA) has been established for Sodium hydroxide, present in significant quantities in this product. This value is 2mg/m³. The corresponding STEL level is "Peak". The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. See ingredients section on page 1 of this data sheet. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

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Engineering Controls:

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

Personal Protection:

- Respiratory Protection: It is usually safe to not use a dust mask or respirator protection on account of this product. However, if the product is being used in dusty or confined conditions, use of a mask or respirator may be preferred. For help in selecting suitable equipment, consult AS/NZS 1715.
- Protective Gloves: Impermeable protective gloves must be worn when you are using this product. Failure to do so will lead to burns to the skin, and likely scarring. All skin areas must be covered. Glove selection can be made on the basis of the following resistance for Sodium hydroxide based products. Neoprene: excellent. Rubber: excellent. Nitrile: excellent. Butyl: excellent. For help in selecting suitable equipment, consult AS 2161.
- Eye Protection: Protective eyewear must be worn when using this product. Coverage should extend to all facial areas. Eye contact will prove at best painful and will probably cause irreversible damage if contact is other than brief. Consult AS1336 and AS/NZS 1337 for advice on Industrial Eye Protection.
- Clothing: Clean impermeable overalls or protective clothing should always be worn when handling this product, preferably with an apron. If contaminated, laundry should be advised of the nature of the contamination, or, preferably, clothing should be destroyed. Consult AS2919 for advice on Industrial Clothing.
- Safety Boots: Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.
Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

IV SAFE HANDLING INFORMATION

Safety Phrases are: S2, S20, S26, S28, S37/39. Keep out of reach of children. When using, do not eat or drink. In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. After contact with skin, wash immediately with plenty of (specify material). Wear suitable gloves and eye/face protection.

Storage & Transport

This product is classed as UN1760, Dangerous Goods Class 8 Corrosive Substances. Proper Shipping name is CORROSIVE LIQUID, N.O.S. Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods).

This product is a S6 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

Spills & Disposals

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In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Wear full protective chemically resistant clothing including face mask, face shield, gauntlets and self contained breathing apparatus. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. Can be slippery on floors, especially when wet. Recycle containers wherever possible. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Contaminated area may be neutralised by washing with weak or dilute acid. This material may be suitable for approved landfill. Dispose of only in accord with all regulations. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Fire & Explosion Hazard

There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Flashpoint: Does not burn.

Flammability limits: Not applicable. This product does not burn.

Extinguishing Media: This product does not burn. Use extinguishing media suited to the materials that are burning. water fog. Water fog or fine spray is the preferred medium for large fires.

Special Fire Fighting procedures: Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and self contained breathing apparatus. All skin areas should be covered. Ensure that no spillage enters drains or water courses.

Unusual Fire & Explosion Hazards: Fire decomposition products from this product may form toxic mixtures in confined spaces. Likely to decompose only after heating to dryness followed by further strong heating.

Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke.

Materials to avoid: Acids, zinc, tin, aluminium and their alloys.

V OTHER INFORMATION

This MSDS is prepared in accord with the Worksafe Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets", 1994.

<u>Contact Points:</u>	AUSTRALIA
Police and Fire Brigade:	Dial 000
If ineffective:	Dial 1100 (Exchange)
National Poisons Information Centre:	Dial 13 1126 (from anywhere in Australia)

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. The responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Please read all labels carefully before using product.