

Material Safety Data Sheet



This material is hazardous according to criteria of NOHSC.
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail.

1. Identification of the substance/preparation and of the company/undertaking

Product Name: PEARL CAUSTIC SODA

Synonyms: Sodium hydroxide; Soda lye; Sodium hydrate; White caustic; Caustic soda solid; Caustic soda pearl; Solid caustic soda.

Supplier: Orica Australia Pty Ltd

ABN: 004 117 828

Street Address: 1 Nicholson Street,
Melbourne 3000
Australia

Telephone Number: +61 3 9665 7111

Facsimile: +61 3 9665 7937

Emergency Telephone: 1 800 033 111 (ALL HOURS)

2. Composition/information on ingredients

Product Description: General chemical.

Sodium hydroxide 1310-73-2	>=98%	R35, R41
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3. Hazards identification

Risk Phrases: Causes severe burns. Risk of serious damage to eyes.

Poisons Schedule: S6 Poison.

4. First-aid measures

For advice, contact a Poisons Information Centre (Phone eg. Australia 131 126; New Zealand 0 800 764766) or a doctor.

Inhalation: Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact: If spilt on large areas of skin or hair, immediately drench with running water and remove clothing. Continue to wash skin and hair with plenty of water (and soap if material is insoluble) until advised to stop by the Poisons Information Centre or a doctor. For skin burns, cover with a clean, dry dressing until medical help is available.

Eye Contact: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing

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Ingestion: until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

Notes to physician: Treat symptomatically. Can cause corneal burns.

5. Fire-fighting measures

Specific Hazards: Non-combustible material.

Fire-fighting advice: Decomposes on heating emitting toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

Suitable Extinguishing Media: Not combustible, however, if material is involved in a fire use: Water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. Accidental release measures

Clear area of all unprotected personnel. Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Caution - heat may be evolved on contact with water. If contamination of sewers or waterways has occurred advise local emergency services.

7. Handling and storage

Handling advice: Avoid skin and eye contact and breathing in dust.

Storage advice: Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

This material is a Scheduled Poison S6 and must be stored, maintained and used in accordance with the relevant regulations.

8. Exposure controls/personal protection

Sodium hydroxide: Peak Limitation = 2 mg/m³

As published by the National Occupational Health and Safety Commission.

Peak Limitation - a ceiling concentration which should not be exceeded over a measurement period which should be as short as possible but not exceeding 15 minutes.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Engineering Control Measures:

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Avoid generating and

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breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

Personal Protective Equipment:

Orica Personal Protection Guide No. 1, 1998: F - OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK.

Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If dust exists, wear dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. Physical and chemical properties

Physical state:	Solid
Colour:	White
Molecular Formula:	NaOH
Solubility:	Soluble in water.
Specific Gravity:	2.13 @20°C
Flash Point (°C):	Not applicable.
Melting Point/Range (°C):	318
Boiling Point/Range (°C):	1390
pH:	12.7 (1% aqueous solution)

10. Stability and reactivity

Stability: Incompatible with acids , aluminium , tin , zinc , and chlorinated hydrocarbons . Will absorb moisture from the atmosphere. Reacts exothermically with water .

11. Toxicological information

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

- Ingestion:** Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.
- Eye contact:** A severe eye irritant. Corrosive to eyes; contact can cause corneal burns. Contamination of eyes can result in permanent injury.
- Skin contact:** Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns.
- Inhalation:** Breathing in dust may result in respiratory irritation.

Long Term Effects:

No information available for the product.

Toxicological Data:

No LD50 data available for the product.

12. Ecotoxicological information

Avoid contaminating waterways.

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13. Disposal considerations

Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Decontamination and destruction of containers should be considered.

14. Transport information

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail.

UN No: 1823
Class-primary: 8 Corrosive
Packing Group: II
Proper Shipping Name: SODIUM HYDROXIDE, SOLID

Hazchem Code: 2X

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

UN No: 1823
Class-primary: 8 Corrosive
Packing Group: II
Proper Shipping Name: SODIUM HYDROXIDE, SOLID

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 1823
Class-primary: 8 Corrosive
Packing Group: II
Proper Shipping Name: SODIUM HYDROXIDE, SOLID

15. Regulatory information

Classification: This material is hazardous according to criteria of NOHSC.
C: Corrosive

Risk Phrase(s): R35: Causes severe burns.
R41: Risk of serious damage to eyes.

Safety Phrase(s): S22: Do not breathe dust.
S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical

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advice.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

Poisons Schedule: S6 Poison.

This material is listed on the Australian Inventory of Chemical Substances (AICS).

16. Other information

This material safety data sheet has been prepared by SH&E Shared Services, Orica.

Reason(s) for Issue:

Revised Primary MSDS

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Orica Limited cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Orica representative or Orica Limited at the contact details on page 1.

Orica Limited's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

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