Sodium Hydroxide, ≥ 98% (Caustic Soda) — Catalogue No. ASC-8061
Date of issue: 10/10/2024 | **Revision:** 1.0 | **Supersedes:** New issue

1. Identification

Product identifier	Sodium Hydroxide, ≥ 98% (Caustic Soda)
Catalogue number	ASC-8061
Other names	Caustic soda; lye
Recommended use	Laboratory reagent; strong base for analytical and industrial use.
Restrictions on use	For laboratory, analytical and industrial use only. Not for food, drug, cosmetic or household use.
Supplier	AuSaMicS Pty Ltd 36/25 Trafalgar Road, Epping VIC 3076, Australia ABN 56 676 640 467
Contact	Phone: +61 412 520 598 Email: support@ausamics.com Web: www.ausamics.com.au
Emergency telephone	Poisons Information Centre (Australia, 24 h): 13 11 26 Supplier (business hours): +61 412 520 598

2. Hazard Identification

Hazardous chemical and **Dangerous Goods** according to the WHS Regulations (GHS Revision 7) and the ADG Code.

GHS classification	Corrosive to Metals Category 1 Skin Corrosion Category 1A Serious Eye Damage Category 1
Signal word	DANGER

Hazard pictograms



Hazard statements	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage.
Precautionary statements — Prevention	P234 Keep only in original packaging. P260 Do not breathe dust. P264 Wash hands thoroughly after handling. P280 Wear protective gloves, protective clothing, eye protection and face protection.

Precautionary statements — Response	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor. P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage.
Precautionary statements — Storage	P405 Store locked up.
Precautionary statements — Disposal	P501 Dispose of contents and container in accordance with local regulations.
Poisons Schedule (SUSMP)	Schedule 6

3. Composition / Information on Ingredients

Substance.

Ingredient	CAS No.	EC No.	Content (%)
Sodium hydroxide	1310-73-2	215-185-5	≥ 98
Sodium carbonate	497-19-8	207-838-8	≤ 1.0

4. First Aid Measures

Eye contact	Immediately rinse with running water for at least 15 minutes, holding eyelids apart. Remove contact lenses if easy to do. Transport to hospital or doctor without delay.
Skin contact	Immediately remove contaminated clothing and footwear. Flush skin with large amounts of water, using a safety shower if available, until advised to stop by the Poisons Information Centre. Seek medical attention.
Inhalation	Move to fresh air. Keep at rest. Seek medical attention; lung oedema may be delayed up to 24 hours.
Ingestion	Rinse mouth. Do NOT induce vomiting. Give small amounts of water to drink if the person is conscious. Call 13 11 26 and seek urgent medical attention.
Advice to doctor	Alkaline corrosive. Damage occurs by liquefaction necrosis. Do not give neutralising agents. Treat symptomatically.

5. Fire Fighting Measures

Suitable extinguishing media	Use media suitable for the surrounding fire. The product is not combustible.
Specific hazards	Contact with water generates heat. Reacts with aluminium, zinc and tin, releasing flammable hydrogen gas.

Advice for fire fighters	Wear full protective clothing and self-contained breathing apparatus.
Hazchem code	2W

6. Accidental Release Measures

Personal precautions	Wear goggles, face shield, gloves and protective clothing. Avoid dust and contact.
Environmental precautions	Prevent entry into drains and waterways.
Clean-up	Sweep up dry without creating dust and place in a labelled plastic container. Neutralise residues with dilute acid only under controlled conditions, then rinse the area.

7. Handling and Storage

Safe handling	Avoid all personal contact, including inhalation. Always add NaOH to water, never water to NaOH. Use in a well-ventilated area.
Storage conditions	Store at 15–25 °C in original tightly closed plastic or glass containers, in a dry place. Store locked up, away from acids and foodstuffs.
Incompatible materials	Acids; aluminium, zinc, tin and their alloys; ammonium salts; nitro compounds; halogenated organic compounds. Do not use aluminium or galvanised containers.

8. Exposure Controls / Personal Protection

Workplace exposure standard	Sodium hydroxide: peak limitation 2 mg/m³ (Safe Work Australia).
Engineering controls	Local exhaust ventilation where dust may be generated.
Eye protection	Chemical goggles (AS/NZS 1337.1); face shield when handling quantities or solutions.
Hand protection	Nitrile, neoprene, butyl or PVC gloves.
Respiratory protection	P2 particulate respirator (AS/NZS 1716) if dust is generated.
Body protection	Laboratory coat or overalls; PVC apron. Eyewash station and safety shower nearby.

9. Physical and Chemical Properties

Appearance	White pellets or flakes; hygroscopic
Odour	Odourless
pH	About 13 (0.1 M solution); about 13.4 (1% solution)
Melting point	318 °C
Boiling point	1,388 °C
Relative density	2.13 at 20 °C
Solubility in water	About 1,090 g/L at 20 °C; strongly exothermic

Flammability	Not flammable
Molecular weight	40.00 g/mol

10. Stability and Reactivity

Reactivity	Reacts violently with acids. Corrosive to aluminium, zinc and tin, releasing hydrogen.
Chemical stability	Stable when stored as recommended. Absorbs water and carbon dioxide from air.
Conditions to avoid	Moisture; contact with incompatible materials.
Incompatible materials	See Section 7.
Hazardous decomposition products	Sodium oxides at very high temperatures.

11. Toxicological Information

Acute toxicity	Not classified for acute toxicity; ingestion causes severe corrosive injury to the mouth, throat and stomach.
Skin corrosion	Causes severe burns; pain may be delayed.
Eye damage	Causes severe eye damage, possibly blindness.
Inhalation	Dust irritates and may damage the respiratory tract.
Sensitisation / carcinogenicity / reproductive toxicity	Not classified.

12. Ecological Information

Harmful to aquatic life through pH change. Fish LC50 (96 h): 45–125 mg/L. Not persistent or bioaccumulative. Prevent release to drains and waterways.

13. Disposal Considerations

Neutralise and dispose of through an approved chemical waste contractor in accordance with local regulations. Do not discharge into drains.

14. Transport Information

	ADG (road/rail)	IATA (air)	IMDG (sea)
UN number	1823	1823	1823
Proper shipping name	SODIUM HYDROXIDE, SOLID	Sodium hydroxide, solid	SODIUM HYDROXIDE, SOLID
Class / packing group	8 / II	8 / II	8 / II
Hazchem / EmS	2W	ERG 8L	F-A, S-B
Limited quantity	1 kg	Y844, 5 kg	1 kg
Marine pollutant	No	No	No

15. Regulatory Information

Australian WHS classification	Hazardous chemical
Poisons Standard (SUSMP)	Schedule 6
Dangerous Goods	Class 8, PG II
Inventory	Listed on the Australian Inventory of Industrial Chemicals (AIIC)

16. Other Information

Date of preparation	10/10/2024
Revision	1.0 — first issue
Basis of classification	Harmonised classification (Skin Corr. 1A) with Met. Corr. 1 (H290), consistent with major manufacturer classifications.

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