



HURST SCIENTIFIC

Safety Data Sheet
Sodium Hydroxide Solution 1-5%

SECTION 1: Identification

GHS Product identifier

Product name	Sodium Hydroxide Solution 1-5%
Product number	SH1-5-500M, 1L, 2.5L, 5L, 10L
Brand	HurstChem

Other means of identification

0.5N Sodium Hydroxide, 1N Sodium Hydroxide.

Recommended use of the chemical and restrictions on use

Laboratory Reagent

Supplier's details

Name	Hurst Scientific
Address	2/36 Hensbrook Loop 6112 Forrestdale WA Australia
Telephone	1300 778 068
email	sales@hurstscientific.com.au

Emergency phone number

Australian Poisons Information Centre 131 126
Australian Emergency Services 000

SECTION 2: Hazard identification

General hazard statement

Classified as a Hazardous substance according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classification of the substance or mixture

GHS classification in accordance with: UN GHS revision 8

- Skin corrosion/irritation, Cat. 1A
- Eye damage/irritation, Cat. 1

GHS label elements, including precautionary statements

Safety Data Sheet

Sodium Hydroxide Solution 1-5%

Pictograms



1. Corrosion

Hazard statement(s)

H290

May be corrosive to metals

H314

Causes severe skin burns and eye damage

Precautionary statement(s)

P233

Keep container tightly closed.

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P280

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/ ...

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 affected areas with water [or shower].

P304+P340

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P403

Store in a well-ventilated place.

P405

Store locked up.

P501

Dispose of contents/container to ...

Other hazards which do not result in classification

Classified as a Dangerous goods according to the ADG Code for the Transport of Dangerous Goods by Road and Rail (7th Edition).

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

1. Water/Aqua/Eau

Concentration

Balance

CAS no.

7732-18-5

2. Sodium hydroxide

Concentration

1 - < 5 %

CAS no.

1310-73-2

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled

Evacuate to fresh air immediately. If unconscious place in recovery position, provide artificial respiration if breathing ceases.

In case of skin contact

Remove contaminated clothing and wash affected area with soap and water thoroughly. Seek medical attention.

In case of eye contact

Flush eyes with copious amounts of water for at least 15 minutes. Seek medical attention immediately.

Safety Data Sheet

Sodium Hydroxide Solution 1-5%

If swallowed

DO NOT induce vomiting. Wash mouth out with copious amounts of water and seek immediate medical attention.

Personal protective equipment for first-aid responders

Eye wash station, safety shower and First Aid kit.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Carbon Dioxide, water spray or alcohol-resistant foam.

Specific hazards arising from the chemical

Toxic gases may evolve.

Special protective actions for fire-fighters

Wear SCBA (Self-Contained Breathing Apparatus) and full protective equipment.

Further information

Hazchem code 2R

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing. Ensure adequate ventilation. If possible, contain the spill. Evacuate all unnecessary personnel.

Methods and materials for containment and cleaning up

Absorb with vermiculite or similar and place into a suitably labelled container. Dispose of waste according to local authority guidelines. Wash the affected area with a large volume of water. Do not contaminate drains or waterways.

SECTION 7: Handling and storage

Precautions for safe handling

This product is a corrosive liquid. Use only in an adequately ventilated area. Avoid breathing in mists or vapours. Wear appropriate protective clothing to avoid any exposure and practice good personal hygiene.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from incompatibles. Keep containers tightly closed.

SECTION 8: Exposure controls/personal protection

Control parameters

CAS: 1310-73-2

Sodium hydroxide

AU/SWA (Australia): 2 Peak limitation mg/m³ TWA inhalation

Appropriate engineering controls

Ensure adequate ventilation to maintain airborne concentrations below national exposure standards.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety Data Sheet

Sodium Hydroxide Solution 1-5%

Safety glasses or goggles.

Skin protection

Chemical-resistant gloves and laboratory coat.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Color	Clear
Odor	No distinct odour
Melting point/freezing point	0°C
Boiling point or initial boiling point and boiling range	100°C
Flammability	Non-flammable
Lower and upper explosion limit/flammability limit	Not applicable
pH	>12
Solubility	Water soluble
Vapor pressure	Not available
Density and/or relative density	Approx. 1.0
Relative vapor density	Not available

SECTION 10: Stability and reactivity

Reactivity

Non-reactive under recommended conditions for use and storage.

Chemical stability

Stable under recommended conditions for use and storage.

Possibility of hazardous reactions

Polymerisation will not occur. Will react with incompatibles.

Conditions to avoid

Direct sunlight and temperature extremes.

Incompatible materials

Aluminium, Zinc, Tin, Acids and Ammonia salts.

Hazardous decomposition products

Toxic gases may evolve.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Eye Contact Causes severe burns. Will result in severe pain, stinging, blurring, lacrimation and possible permanent corneal damage. Burns may cause blindness.

Skin Contact Corrosive to the skin. Causes severe burns. Can cause severe pain, redness, itching, irritation and chemical burns with resultant tissue destruction.

Inhalation Inhalation will result in respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary oedema, pneumonitis and emphysema.

Ingestion Will cause severe chemical burns to the mucous membranes of the mouth, oesophagus and stomach resulting in extensive tissue damage and severe pain.

Damage to oesophagus and stomach may be fatal.

Safety Data Sheet

Sodium Hydroxide Solution 1-5%

CHRONIC: Chronic exposure by inhalation may lead to respiratory disorders, such as emphysema and chronic bronchitis. Chronic skin contact may lead to dermatitis.

Skin corrosion/irritation

Causes burns.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitization

No classification available.

Germ cell mutagenicity

No classification available.

Carcinogenicity

Not listed in the IARC monographs.

Reproductive toxicity

No classification available

Specific target organ toxicity (STOT) - single exposure

No classification available

Specific target organ toxicity (STOT) - repeated exposure

No classification available

Aspiration hazard

No classification available

Additional information

TOXICITY DATA:

Sodium Hydroxide: (Intraperitoneal, Mouse): LD50 40mg/kg
(Oral, Rat): LD50 2000 mg/kg

SECTION 12: Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not expected to bio-accumulate.

Mobility in soil

Not available.

Other adverse effects

Environmental fate (exposure) Do not contaminate drains and waterways.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Safety Data Sheet

Sodium Hydroxide Solution 1-5%

Dispose of in accordance with local authority guidelines.

Packaging disposal

Dispose of in accordance with local authority guidelines.

Other disposal recommendations

Special precautions Nil.

SECTION 14: Transport information

UN Number	1824
Hazchem emergency action code (EAC)	2R
UN Proper Shipping Name	Sodium Hydroxide Solution
Transport hazard class(es)	8
Packing group	II

Special precautions for user

Dangerous goods of Class 8 (Corrosive) are incompatible in a placard load with any of the following:

- Class 1, Explosive
- Class 4.3, Dangerous When Wet Substance
- Class 5.1, Oxidising Agent
- Class 5.2, Organic Peroxide
- Class 6, Toxic and Infectious Substances, if the Class 6 dangerous goods are cyanides and the Class 8 dangerous goods are acids
- Class 7, Radioactive Substance

SECTION 15: Regulatory information

Chemical Safety Assessment

- TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day week.

SECTION 16: Other information

Further information/disclaimer

This SDS is prepared in accordance with the Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011). The information contained within is believed to be accurate at the date of preparation/review. Hurst Scientific makes no claims of the accuracy or completeness of the information and excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. It is recommended the user make their own determinations as to the suitability of the information provided to the application in which the product is to be used. Copyright © 2024 Hurst Scientific

Preparation information

References

1. Safe Work Australia, Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, (2011).
2. Safe Work Australia, National Code of Practice for the Labelling of Workplace Hazardous Chemicals (2015).
3. Safe Work Australia, Workplace Exposure Standards for Airborne Contaminants (2013)
4. National Transport Commission Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code); Canprint: Canberra (2007), Volume 1, 7th Edition.
5. Standards Australia, Dangerous Goods Initial Emergency Response Guide: Australian Handbook (SAA/SNZ HB76); Homebush (2004).