



## HURST SCIENTIFIC

**Safety Data Sheet**  
**Sodium Hydroxide Solution 1-5%**

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## SECTION 1: Identification

## GHS Product identifier

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: IIN GHS revision 8

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

## GHS label elements, including precautionary statements

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### 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).

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## 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

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## 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.

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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.

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## 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

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## 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.

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## 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.

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## SECTION 8: Exposure controls/personal protection

### Control parameters

#### CAS: 1310-73-2

Sodium hydroxide

AU/SWA (Australia): 2 Peak limitation mg/m<sup>3</sup> 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

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Safety glasses or goggles.

### Skin protection

Chemical-resistant gloves and laboratory coat.

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## 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

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## 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.

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## 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.

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**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

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## 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.

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## SECTION 13: Disposal considerations

### **Disposal methods**

### **Product disposal**

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Dispose of in accordance with local authority guidelines.

### Packaging disposal

Dispose of in accordance with local authority guidelines.

### Other disposal recommendations

Special precautions Nil.

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## 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

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## 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.

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## 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).