

**Section 1 – Identification of the Material and Supplier**

**Product Name:** Evopure Tile & Vinyl Cleaner  
**Proper Shipping Name:** Sodium Hydroxide Solution  
**Product Use:** A concentrated cleaner / degreaser, applied by trigger sprays onto tiles and grout around pools.  
**Creation Date:** 1/01/2018  
**This version issued:** 1/01/2023 and is valid for 5 years from this date.

**Details of Manufacturer:**

Evolution Water & Lighting Solutions Pty Ltd  
1/33 Hinkler Drive, Highland Park QLD 4211  
Phone: +61 7 5565 0000  
Email: enquiries@evolutionwls.com.au

**Emergency Telephone Number: 000**

**Poisons Information Centre: 131 126 in Australia, 0800 764 766 in New Zealand**

**Section 2 – Hazards Identification**

**Hazard Classification of Substance**

Classified as hazardous according to criteria of Safework Australia.

Not classified as dangerous according to criteria of ADG Code.

**SUSMP Classification:** S5 - CAUTION

**GHS Signal word: DANGER**

Corrosive to metals (Category 1)  
Skin corrosion/irritation (Category 1A)  
Serious eye damage/eye irritation (Category 1)



**HAZARD STATEMENTS:**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

**GENERAL**

P101 If medical advice is needed, have product container or label at hand  
P102 Keep out of reach of children  
P103 Read label before use

**PREVENTION**

P234 Keep only in original container.  
P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**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/shower.  
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
P390 Absorb spillage to prevent material damage.

**STORAGE**

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P406 Store in corrosive resistant container with a resistant inner liner.

**DISPOSAL**

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Section 3 – Composition/Information on Ingredients**

**Ingredients**

Chemical Entity	CAS Number	Proportion	GHS Classification
Sodium Hydroxide	1310-73-2	2%<Conc<4%	H290 ; H314

If the sum of ingredients is less than 100%, the material consists of further ingredients determined not to be hazardous or below their cut-off limits as listed in HSIS.

**Section 4 – First Aid Measures**

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

**Ingestion:** Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Seek immediate medical assistance.

**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. For all but the most minor symptoms arrange for patient to be seen by a doctor as soon as possible, either on site or at the nearest hospital.

**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.

**Eye Contact:** If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

**Advice to Doctor:** Treat symptomatically. Can cause corneal burns.

**Section 5 – Fire Fighting Measures**

**Suitable Extinguishing Media:** Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

**Hazards from Combustion Productions:** Non-combustible material.

**Special Protective Precautions & Equipment for Fire Fighters:** Not combustible, however following evaporation of aqueous component residual material can decompose if involved in a fire, emitting toxic fumes. Contact with metals may liberate hydrogen gas which is extremely flammable. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

**Hazchem Code:** 2R

**Section 6 – Accidental Release Measures**

**Emergency Procedures / Environmental Precautions:** Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

**Personal Precautions / Protective Equipment / Methods & Materials for Containment & Cleaning Up:** Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Caution - heat may be evolved on contact with water.

### Section 7 – Handling and Storage

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

**Precautions for Safe Handling:** Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children.

**Conditions for Safe Storage:** Store in a cool, dry, well ventilated place. Store away from incompatible materials described in Section 10. Store away from foodstuffs. Do not store in aluminium or galvanised containers nor use die-cast zinc or aluminium bungs; plastic bungs should be used. At temperatures greater than 40°C, tanks must be stress relieved. Keep containers closed when not in use - check regularly for leaks.

### Section 8 – Exposure Controls and Personal Protection

**Control Parameters:** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Sodium hydroxide: Peak Limitation = 2 mg/m<sup>3</sup>

2-Butoxyethanol: 8hr TWA = 96.9 mg/m<sup>3</sup> (20 ppm), 15 min STEL = 242 mg/m<sup>3</sup> (50 ppm), Sk

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

**Engineering Controls:** Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

**Personal Protection:** The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Wear overalls, chemical goggles, face shield, elbow-length impervious gloves, splash apron or equivalent chemical impervious outer garment, and rubber boots. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

### Section 9 – Physical and Chemical Properties

<b>Appearance:</b>	Light orange, mobile medium foaming liquid.
<b>Flammability:</b>	Product is not flammable.
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	100°C.
<b>Flash Point:</b>	Unknown
<b>Vapour Pressure:</b>	Unknown
<b>Volatiles:</b>	Not Stated.
<b>Vapour Density:</b>	Unknown
<b>pH 1% Aqueous Solution:</b>	11.5-12.5

**Specific Gravity:** 1.05-1.08  
**Solubility in Water:** Soluble in water.

### Section 10 – Stability and Reactivity

**Reactivity:** Reacts violently with acids. Reacts exothermically on dilution with water.

**Chemical Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Absorbs carbon dioxide from the air.

**Conditions to Avoid:** Avoid contact with foodstuffs.

**Incompatible Materials:** Incompatible with ammonium salts, aluminium, tin, and zinc.

**Hazardous Decomposition Products:** None known.

**Hazardous Reactions:** Reacts with ammonium salts, evolving ammonia gas. Reacts readily with various reducing sugars (i.e. fructose, galactose, maltose, dry whey solids) to produce carbon monoxide. Take precautions including monitoring the tank atmosphere for carbon monoxide to ensure safety of personnel before vessel entry.

### Section 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:

**Symptoms of Exposure:** Considered to be harmful by all exposure routes. Contamination of eyes can result in permanent injury.

**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 mists or aerosols will produce respiratory irritation.

**Acute:** No LD50 data available for the product. For the constituent Sodium Hydroxide :

Sodium Hydroxide LD50 intraperitoneal (mouse) 40mg/kg. : Oral Lowest Lethal Dose (rabbit) 500mg/kg

SKIN CORROSION/IRRITATION: Severe irritant (rabbit).

CHRONIC EFFECTS: No information available for the product.

### Section 12 – Ecological Information

**Ecotoxicity:** Avoid contaminating waterways, toxic to aquatic life.

**Persistence and Degradability:** Low

**Mobility in Soil:** High

**Environmental Fate (Exposure):** Prevent, by any means available, spillage from entering drains or water courses. DO NOT discharge into sewer or waterways

**Bioaccumulative Potential:** Low

### Section 13 – Disposal Considerations

**Disposal Methods and Containers:** Refer to State Land Waste Management Authority. Empty containers must be decontaminated. Normally suitable for disposal at approved land waste site.

### Section 14 – Transport Information

**Road and Rail Transport:** Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**Marine Transport:** Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN Number: 1824  
Transport Hazard Class/s: 8 Corrosive  
Packing Group: II  
UN Proper Shipping Name: Sodium Hydroxide Solution  
Hazchem Code: F-A  
IERG Number: S-B

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

UN Number: 1824  
Transport Hazard Class/s: 8 Corrosive  
Packing Group: II  
UN Proper Shipping Name: Sodium Hydroxide Solution

### Section 15 – Regulatory Information

**Classification:** Classified as hazardous according to criteria of SAFEWORK Australia.

**Classification of the Substance or Mixture:**

Corrosive to metals (Category 1)  
Skin corrosion/irritation (Category 1A)  
Serious eye damage/eye irritation (Category 1)

**Hazard Statement(s):**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

**Poisons Schedule (SUSMP):** 5 CAUTION

**AICS:** All ingredients are on the Australian Inventory of Chemical Substances.

### Section 16 – Other Information

This SDS contains only safety-related information. For other data see product literature.

**Contact Person / Point:**

FOR EMERGENCIES ONLY CONTACT: Australia: 000  
POISONS INFORMATION CENTRE: Australia 131126  
New Zealand 0800 764 766

**Acronyms:**

**ADG** Australian Code for the Transport of Dangerous Goods by Road and Rail  
**ACGIH** American Conference of Governmental Industrial Hygienists  
**ASCC** Australian Safety and Compensation Council  
**Carcinogen Category Number** 1. Established human carcinogen  
2. Probably human carcinogen  
3. Substances suspected of having carcinogenic potential  
**Code AICS** Australian Inventory of Chemical Substances  
**CAS number** Chemical Abstracts Service Registry Number  
**EPG** Emergency Procedure Guide ( superseded by IERG)

<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>IATA</b>	International Air Transport Association
<b>IERG</b>	HB 76-2004 Dangerous goods - Initial Emergency Response Guide
<b>IMDG</b>	International Maritime Dangerous Goods. A uniform code for transport of dangerous goods at sea.
<b>LEL</b>	lower flammable (explosive) limits in air;
<b>LD<sub>50</sub></b>	Lethal Dose sufficient to kill 50% of test population
<b>NIOSH</b>	National Institute for Occupational Safety and Health The United States federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness.
<b>NOAEL</b>	No Observed Adverse Effect Level
<b>NOEL</b>	No Observable Effect Level
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>NTP</b>	National Toxicology Program (USA)
<b>PEL</b>	Permissible Exposure Limit
<b>RTECS</b>	Registry of Toxic Effects of Chemical Substances (Symyx Technologies')
<b>TCLO</b>	Toxic Concentration Low
<b>TDLO</b>	Toxic Dose Low : lowest dosage per unit of bodyweight (typically stated in milligrams per kilogram) of a substance known to have produced signs of toxicity in a particular animal species.
<b>TLV</b>	Threshold Limit Value (ACGIH):The time weighted average used to describe exposure which is harmless to most of the population when exposed 8 hours per day, 40 hours per week.
<b>TWA</b>	(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. 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.
<b>SAFework</b>	Independent statutory agency with primary responsibility to improve occupational health and safety and workers' compensation arrangements across Australia.
<b>STEL</b>	(Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.
<b>SUSDP</b>	Standard for the Uniform Scheduling of Drugs & Poisons
<b>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UEL</b>	upper flammable (explosive) limits in air;
<b>UN Number</b>	United Nations Number

**Sources for data.** Safety Data Sheets from Suppliers  
 Hazardous Substances Information System (HSIS)– ASCC Australia (on-line)  
 GHS (Globally Harmonised System of Substance Classification & Labelling)  
 REACH (European Chemical Substance Information System)  
 ADG Code 7th Edition  
 SUSMP No 11

**Disclaimer:**

This SDS 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 Evolution Water and Lighting Solutions Pty Ltd 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 Evolution Water and Lighting Solutions Pty Ltd at the contact details on page 1. Evolution Water and Lighting Solutions Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request. Evolution Water and Lighting Solutions Pty Ltd however makes no warranty whatsoever, expressed, implied or of merchantability regarding the accuracy of such data or the results to be obtained from the use thereof and assumes no responsibility for injury to buyer or third persons or for any damage to property, Buyer assumes all risks.