

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

**Product Name:** Evopure Filter Cleaner & Degreaser  
**Proper Shipping Name:** Corrosive Solid, Basic, Inorganic, N.O.S.  
**Product Use:** An alkaline degreaser for cleaning oils and greases from sand and cartridge filters.  
**Creation Date:** 1/01/2018  
**This version issued:** 1/01/2018 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  
Fax: +61 7 5565 0010  
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.

Classified as dangerous according to criteria of ADG Code.

**SUSMP Classification:** S5 - CAUTION

**GHS Signal word: DANGER**

Corrosive to Metals - Category 1  
Acute Oral Toxicity - Category 4  
Skin Corrosion - Sub-category 1A  
Eye Damage - Category 1  
Specific target organ toxicity (single exposure) - Category 3



**HAZARD STATEMENTS:**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.

**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.  
P260 Do not breathe dust / vapours.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves / protective clothing / eye protection / face protection.

**RESPONSE**

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
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).

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P363 Wash contaminated clothing before re-use.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

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
disodium metasilicate	6834-92-0	30% <Conc <60%	H290; H302; H314; H335
sodium carbonate	497-19-8	20% <Conc <40%	H319
sodium hydroxide	1310-73-2	2% < Conc <5%	H290; H314;
(C10-16) Alkylbenzenesulfonic Acid, Sodium Salt	68081-81-2	<5%	H302; H315; H318; H335;

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

**General Information:** You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 131 126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

**Ingestion:** If swallowed, do NOT induce vomiting. Give 1-3 cups of water to drink. Never give anything by mouth to an unconscious person. Seek medical attention.

**Eye Contact:** Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport promptly to hospital or medical centre.

**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.

**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.

**Advice to Doctor:** Treat symptomatically for exposure to strongly alkaline corrosive material.

#### Symptoms of Exposure:

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:

**Swallowed:** 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:** Material is irritant to the mucous membranes of the respiratory tract (airways).

### Section 5 – Fire Fighting Measures

**Suitable Extinguishing Media:** Not combustible, however, if material is involved in a fire use: Extinguishing media appropriate to surrounding fire conditions.

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

**Special Protective Precautions & Equipment for Fire Fighters:** Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. Not classed as flammable, classed as Class 8 (Corrosive) under ADG Code. Note primary packs <5kg are not designated Dangerous Goods.

**Hazchem Code:** 2X

### 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:** 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. Wash area down with excess 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 dust. Keep out of reach of children.

**Conditions for Safe Storage:** Store in a cool, dry, well ventilated place. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

### Section 8 – Exposure Controls and Personal Protection

**National Exposure Standards:** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Sodium hydroxide: TLV: 2mg/m<sup>3</sup> - Ceiling Value by Safe Work Australia .

Ceiling value should not be exceeded even instantaneously.

For Dusts not otherwise classified: 8hr TWA = 10 mg/m<sup>3</sup>

**Engineering Controls:** Ensure ventilation is adequate to maintain air concentrations below 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.

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

**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.

CHEMICAL GOGGLES, GLOVES, DUST MASK, OVERALLS, SAFETY SHOES.



Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a 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.

### Section 9 – Physical and Chemical Properties

<b>Appearance:</b>	Granular off-white powder.
<b>Odour:</b>	Pine odour.
<b>Flammability:</b>	Product is not flammable.
<b>Melting Point:</b>	Unknown
<b>Boiling Point:</b>	NA
<b>Vapour Pressure:</b>	Unknown
<b>Volatiles:</b>	0.5-10%
<b>Vapour Density:</b>	Unknown
<b>Flammability Limits:</b>	Unknown
<b>pH 1% Aqueous Solution:</b>	12.0-12.5
<b>Specific Gravity:</b>	Not tested.
<b>Solubility in Water:</b>	99%

### Section 10 – Stability and Reactivity

**Reactivity:** Reacts violently with acids. Reacts with strong oxidising agents. Hygroscopic: absorbs moisture or water from surrounding air.

**Chemical Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Sodium metasilicate is precipitated by acids, alkaline earth and heavy metal ions. Attacks aluminium, and zinc. Contact with certain metals (eg. Al, Sn, Zn, and their alloys) can generate flammable hydrogen gas.

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

**Incompatible Materials:** Incompatible with strong oxidising agents, acids, aluminium, brass, bronze, copper, fluorine, iron, lead, magnesium, phosphorus pentoxide, tin, zinc.

**Hazardous Decomposition Products:** Carbon dioxide.

**Hazardous Reactions:** In the presence of moisture, the material is corrosive to aluminium, zinc and tin producing highly flammable hydrogen gas.

### Section 11 – Toxicological Information

Sodium Carbonate:	Oral LD50 (rat): 4090 mg/kg Human Lethal Dose approx. 30g
Sodium Metasilicate:	Oral LD50 (rat): 847 mg/kg
Sodium Hydroxide:	Oral LDLO Rabbit: 500 mg/kg ; Skin, Rabbit, Adult, 500 mg/24h Severe irritation Eye, Rabbit, Adult 50mg/24h Severe irritation : Intra peritoneal, Mouse, LD50 40mg/kg

Acute toxicity:	Expected to be harmful Oral LD50 (rat): 500-800mg/kg (Cat4)
Skin corrosion/irritation:	Expected to be a severe irritant (Cat 1A)
Serious eye damage/irritation:	Expected to be a severe irritant. (Cat1)
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	Not expected to be mutagenic.
Carcinogenicity:	Not expected to be carcinogenic.
Reproductive toxicity:	Not expected to impair fertility.
Specific Target Organ Toxicity (STOT) – single exposure:	Material is irritant to the mucous membranes of the respiratory tract (airways). (Cat 3)
Specific Target Organ Toxicity (STOT) – repeated exposure:	No data
Aspiration hazard:	Not expected to be a hazard.

### Section 12 – Ecological Information

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

**Acute Toxicity:**

Fish –96hr LC50 (Brachydanio rerio)	210 mg/L
Aquatic invertebrate –48hr EC50 (Daphnia magna):	1700 mg/L
Algae –	Data not available
Microorganisms –	Data not available

**Chronic Toxicity:**

Fish –	Data not available
Aquatic invertebrate –	Data not available
Algae –	Data not available
Microorganisms –	Data not available

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

**Environmental Fate (Exposure):** This material is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to aquatic life. Diluted material yields dissolved silica in a form that is indistinguishable from natural dissolved silica. It does not contribute to BOD. This material does not bioaccumulate except in species that use silica as a structural material such as diatoms and siliceous sponges. Where abnormally low natural silica concentrations exist (less than 0.1 ppm), dissolved silica may be a limiting nutrient for diatoms and a few other aquatic algal species. However, the addition of excess dissolved silica over the limiting concentration will not stimulate the growth of diatom populations; their growth rate is independent of silica concentration once the limiting concentration is exceeded. Neither silica nor sodium will appreciably bioconcentrate up the food chain.

### 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.

**Special Precautions for Landfill or Incineration:** Contact a specialist disposal company or the local waste regulator for advice. Disposed dry/solid material is not classified as a RCRA Hazardous waste. However, disposed water/wet solutions containing this material are classified as RCRA hazardous waste if they exhibit the corrosive characteristic (pH greater than or equal to 12.5) as defined in EPA rules at 40 C.F.R. § 261.22 (a)(1).



### Section 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; DANGEROUS GOODS.

UN Number:	3262
Transport Hazard Class/s:	8
Packing Group:	III
UN Proper Shipping Name:	Corrosive Solid, Basic, Inorganic, N.O.S.
Hazchem Code:	2X
Additional Information:	Primary packs <5kg not designated Dangerous Goods (ADG Code)

**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:	3262
Transport Hazard Class/s:	8
Packing Group:	III
UN Proper Shipping Name:	Corrosive Solid, Basic, Inorganic, N.O.S.
Special Precautions for User:	Keep Dry
IMDG EMS Fire:	F-A
IMDG EMS Spill:	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:	3262
Transport Hazard Class/s:	8
Packing Group:	III
UN Proper Shipping Name:	Corrosive Solid, Basic, Inorganic, N.O.S.
Special Precautions for User:	Keep Dry

### 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
- Acute Oral Toxicity - Category 4
- Skin Corrosion - Sub-category 1A
- Eye Damage - Category 1
- Specific target organ toxicity (single exposure) - Category 3

**Hazard Statement(s):**

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.

**Poisons Schedule (SUSMP):** S5 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)  
**Hazchem Code** Emergency action code of numbers and letters that provide information to emergency services especially firefighters  
**IARC** International Agency for Research on Cancer  
**IATA** International Air Transport Association  
**IERG** HB 76-2004 Dangerous goods - Initial Emergency Response Guide  
**IMDG** International Maritime Dangerous Goods. A uniform code for transport of dangerous goods at sea.  
**LEL** lower flammable (explosive) limits in air;  
**LD<sub>50</sub>** Lethal Dose sufficient to kill 50% of test population  
**NIOSH** 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.  
**NOAEL** No Observed Adverse Effect Level  
**NOEL** No Observable Effect Level  
**NOHSC** National Occupational Health and Safety Commission  
**NTP** National Toxicology Program (USA)  
**PEL** Permissible Exposure Limit  
**RTECS** Registry of Toxic Effects of Chemical Substances (Symyx Technologies)  
**TCLO** Toxic Concentration Low  
**TDLO** 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.  
**TLV** 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.  
**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.  
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.  
**SAFEWORK** Independent statutory agency with primary responsibility to improve occupational health and safety and workers' compensation arrangements across Australia.  
**STEL** (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.  
**SUSDP** Standard for the Uniform Scheduling of Drugs & Poisons  
**SUSMP** Standard for the Uniform Scheduling of Medicines & Poisons  
**UEL** upper flammable (explosive) limits in air;  
**UN Number** 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.