

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

**Product Name:** Evopure Multi Stain Remover  
**Product Use:** Removes coloured metal stains from swimming pool surfaces.  
**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.

Not classified as dangerous according to criteria of **ADG**.

**SUSMP Classification:** 6 – POISON

**Hazard Category:** Acute Oral Toxicity - Category 4  
Acute Dermal Toxicity - Category 4  
Eye Damage - Category 1  
Skin Irritation - Category 2  
Acute Aquatic Toxicity - Category 3  
Chronic Aquatic Toxicity - Category 3

**GHS Signal word: DANGER**



**HAZARD STATEMENTS:**

H302+H312 Harmful if swallowed or in contact with skin.  
H318 Causes serious eye damage.  
H315 Causes skin irritation.  
H412 Harmful to aquatic life with long lasting effects.

**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**

P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**RESPONSE**

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell  
P330 Rinse mouth.

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

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

P321 Specific treatment (see First Aid Measures on Safety Data Sheet).

P362 Take off contaminated clothing and wash before reuse.

## STORAGE

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

P405 Store locked up.

## DISPOSAL

P501 Dispose of contents/container in accordance with all federal, state and local regulations.

## Section 3 – Composition/Information on Ingredients

### Ingredients

Chemical Entity	CAS Number	Proportion	GHS Classification
Ethanedioic acid	144-62-7	30-50%	H312 H302
2-Hydroxypropane-1,2,3-tricarboxylic acid	77-92-9	30-50%	H316 H318
Amidosulfonic acid	5329-14-6	<20%	H319 H315 H412

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

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

**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.

**Inhalation:** Remove victim to ventilated area without becoming a casualty. If not breathing, give artificial respiration. Consult a physician.

**Medical attention or special treatment required:** Treat symptomatically. Can cause corneal burns. Delayed pulmonary oedema may result.

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

**Ingestion:** Swallowing can result in a severe burning pain of the mouth, throat and stomach followed by profuse vomiting (sometimes bloody). Small doses of oxalate in the body can cause headache, pain and twitching in muscles, and cramps. Larger doses can cause weak and irregular heartbeat, drop in blood pressure and signs of heart failure. Large doses rapidly cause a shock-like state, convulsions, coma and possibly death.

**Eye Contact:** A severe eye irritant. Contamination of eyes can result in permanent injury.

**Skin Contact:** Contact with skin may result in irritation. Solutions of 5% to 10% oxalic acid are irritating to the skin after prolonged exposure and can cause corrosive injury.

**Inhalation:** Breathing in dust may result in respiratory irritation. Inhaled oxalic acid is readily absorbed into the body and may cause headaches and nausea.

**Acute:** Solutions of 5 to 10 percent acid are irritating to the skin after prolonged exposure and can cause corrosive injury.

**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:** Combustible solid.

**Special Protective Precautions & Equipment for Fire Fighters:** Decomposes on heating emitting toxic fumes, including those of oxides of carbon and nitrogen. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition. Keep containers cool with water spray.

**Hazchem Code:** Not applicable.

**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:** Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in dust. Sweep up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

**Section 7 – Handling and Storage**

**Precautions for Safe Handling:** Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation. Keep out of reach of children.

**Conditions for Safe Storage:** Store in a cool, dry, well ventilated place and out of direct sunlight. 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**

**Control Parameters:** Safe Work Australia Workplace Exposure Standards has not assigned any exposure standards for this product, however for the hazardous components:

Name	STEL (mgm <sup>3</sup> )	STEL (ppm)	TWA (mgm <sup>3</sup> )	TWA (ppm)
Ethanedioic acid	2		1	
Nuisance Dust/s			10	

These Workplace 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 workplace 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.

**Appropriate Engineering Controls:** Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Avoid generating and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.

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

**Individual Protection Measures, Such as Personal Protective Equipment (PPE):** 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, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, DUST MASK



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>	White crystalline solid.
<b>Flammability:</b>	Combustible
<b>Melting Point:</b>	Unknown
<b>Boiling Point:</b>	Sublimes at 149-160°C
<b>Flash Point:</b>	Not applicable.
<b>Vapour Pressure:</b>	Unknown.
<b>Volatiles:</b>	0%
<b>Vapour Density:</b>	Unknown.
<b>Flammability Limits:</b>	Unknown.
<b>Specific Gravity:</b>	2.10
<b>Solubility in water:</b>	1 part in 6.3 parts of water at 0°C; 1 in 2 parts at 80°C
<b>pH 1% Solution:</b>	1.2-1.5 Aqueous solution hydrolyses above 80°C

### Section 10 – Stability and Reactivity

**Chemical Stability:** Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Chemical Reactivity:** Reacts exothermically with alkalis. Reacts with strong oxidising agents. Hygroscopic: absorbs moisture or water from surrounding air.

**Possibility of Hazardous Reactions:** Accelerated decomposition occurs when mixed with strong oxidising agents. Vigorous reaction may occur with alkalis yielding heat and pressure, and with acid chlorides producing toxic fumes. May react violently with alkali metals producing flammable hydrogen gas. Reacts strongly with oxidising agents, especially sodium chlorite and sodium hypochlorite.

**Conditions to Avoid Incompatible Materials:** Avoid dust generation. Avoid exposure to moisture. Incompatible with alkalis. Incompatible with strong oxidising agents. Incompatible with most metals in the presence of moisture.

**Hazardous Decomposition Products:** Hydrogen. Carbon monoxide. Oxygen, which will support combustion. Oxides of sulfur. Oxides of nitrogen. Oxides of carbon.

### Section 11 – Toxicological Information

**Acute toxicity:**

**Ethanoic acid:**

ANIMAL TOXICITY DATA LD50 (rat, oral): 475 mg/kg (male). LD50 (rat, oral): 375 mg/kg (female). LD50 (rabbit, skin): 20000 mg/kg.

**EYE IRRITATION (rabbit):** A 30-second exposure to a 5% oxalic acid solution produced conjunctivitis and severe corneal damage which was reversible.

Prolonged exposures produced irreversible corneal damage.

**SKIN IRRITATION (rabbit):** Skin contact with a saturated solution of oxalic acid (about 10%) for five minutes produced redness which persisted for 24 hours; some scaliness was evident but no puffiness or ulceration developed.

**LONG-TERM INGESTION:** Rats fed 2.5 to 5% oxalic acid in their diet showed a loss in growth rate and total body weight and experienced 10 to 25% mortality; males developed stones of calcium oxalate which blocked the urinary system (urolithiasis); estrous cycles were disrupted in females.

**EMBRYOTOXIC EFFECTS:** Sheep fed 6 to 10 g/day throughout gestation produced lambs with calcium oxalate crystals in their kidneys. There was no indication of embryotoxicity.

**Amidosulfonic acid:**

Oral LD50 (rat): 3160 mg/kg.

Oral LD50 (mice): 1312 mg/kg.

Oral LD50 (guinea pig): 1050 mg/kg.

**2-Hydroxypropane-1,2,3-tricarboxylic acid:**

Oral LD50 (rat): 3000 mg/kg

Oral LD50 (mice): 5040 mg/kg

Skin corrosion/irritation: Mild irritant (rabbit).

Serious eye damage/irritation: Severe irritant (rabbit).

Chronic effects: No information available for the product.

Dust causes severe respiratory irritation.

Acute toxicity:	Expected to be toxic LD50 (rat, oral): 375 mg/kg (oxalic )
Skin corrosion/irritation:	Expected to be an irritant.
Serious eye damage/irritation:	Expected to be corrosive , Cat 1
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:	Dust causes severe respiratory irritation.
Specific Target Organ Toxicity (STOT) – repeated exposure:	Long term exposure can result in kidney stones and stone formation in the urinary tract. Exposure to this compound can result in systemic effects including kidney damage, muscle twitching , cramps and nervous system complaints.
Aspiration hazard:	Not expected to be a hazard.

**Section 12 – Ecological Information**

**Ecotoxicity:** Avoid contaminating waterways.

**Aquatic Toxicity:** Harmful to aquatic organisms. May cause long term adverse effects in the aquatic environment.

**Persistence and Degradability:** Product is 80% biodegradable.

**Mobility:** No data available.

**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; NON-DANGEROUS GOODS.

UN Number: Not applicable.

Transport Hazard Class/s: Not applicable.

Packing Group: Not applicable.

UN Proper Shipping Name: Not applicable.

Hazchem Code: Not applicable.

IERG Number: Not applicable.

**Marine Transport:** Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

**Air Transport:** Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

**Section 15 – Regulatory Information**

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

**Classification of the Substance or Mixture:**

Acute Oral Toxicity - Category 4

Acute Dermal Toxicity - Category 4

Eye Damage - Category 1

Skin Irritation - Category 2

Acute Aquatic Toxicity - Category 3

Chronic Aquatic Toxicity - Category 3

**Hazard Statement(s):**

H302+H312 Harmful if swallowed or in contact with skin.

H318 Causes serious eye damage.

H315 Causes skin irritation.

H412 Harmful to aquatic life with long lasting effects.

**Poisons Schedule (SUSMP):** 6 POISON

**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

<b>EPG</b>	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

<b>Sources for data.</b>	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
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**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.