

Section 1 – Identification of the Material and Supplier

Product Name: Evopure Stain Away
Proper Shipping Name: Citric Acid Anhydrous
Product Use: Removes coloured metal stains from swimming pool surfaces.
Creation Date: 1/11/2018
This version issued: 1/11/2018 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: Not Allocated

Hazard Category: Serious Eye Damage/Irritation - Category 2A
Skin Corrosion/Irritation - Category 2
Specific Target Organ Toxicity (Single Exposure) - Category 3

GHS Signal word: DANGER

HAZARD STATEMENTS:

H319 Causes serious eye irritation.
H315 Causes skin irritation.
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

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P271 Use only outdoors or in a well-ventilated area.
P264 Wash skin thoroughly after handling.
P261 Avoid breathing dust.

RESPONSE

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
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.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).



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STORAGE

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

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
Citric Acid	77-92-9	>99%	H315 H318

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 luke-warm water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre. Continue to wash with large amounts of water until medical help is available.

Skin Contact: If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek 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. Seek medical advice if effects persist.

Medical attention or special treatment required: Treat symptomatically.

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: No adverse effects expected, however, large amounts may cause nausea and vomiting. Swallowing may result in irritation to the mouth and throat. Frequent or large oral doses can cause tooth erosion.

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

Skin Contact: Contact with skin will result in mild irritation.

Inhalation: Breathing in dust may result in respiratory irritation.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Media: 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: On burning will emit toxic fumes, including those of oxides of carbon. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Hazchem Code: Not applicable.

Section 6 – Accidental Release Measures

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

Personal Precautions / Protective Equipment / Methods & Materials for Containment & Cleaning Up: Neutralise with lime or soda ash. 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

Precautions for Safe Handling: Avoid skin and eye contact and breathing in dust. In common with many organic chemicals, may form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards". Take precautionary measures against static discharges.

Conditions for Safe Storage: Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Protect from moisture. Keep containers closed when not in use - check regularly for spills.

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 particulates:
Dusts not otherwise classified: 8hr TWA = 10 mg/m³
As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

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.

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

Appearance:	Colourless crystals, odourless, strong acid taste.
Flammability:	Combustible
Melting Point:	153-154.5°C
Boiling Point:	1000°C-1020°C
Flash Point:	100°C
Vapour Pressure:	Unknown.
Volatiles:	0%

Vapour Density:	Unknown.
Flammability Limits:	LEL: 285.5g/m ³ ; UEL 2295.4mg/m ³
Specific Gravity:	1.542
Solubility in water:	Soluble
pH 5% Solution:	1.5-2.5

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.

Corrosiveness: Do not mix with oxidising agents (Class 5).

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur. Strong solutions react vigorously with Sodium Hydroxide solutions.

Conditions to Avoid: Avoid dust generation. Avoid exposure to moisture. Avoid exposure to heat, sources of ignition, and open flame.

Incompatible Materials: Incompatible with strong oxidising agents, alkalis, carbon steel, moisture.

Hazardous Decomposition Products: Oxides of carbon.

Section 11 – Toxicological Information

Acute toxicity:

Acute toxicity:	Oral LD ₅₀ (rat): 3000 mg/kg Oral LD ₅₀ (mice): 5040 mg/kg
Skin corrosion/irritation:	Expected to be a Mild irritant (rabbit).
Serious eye damage/irritation:	expected to be a Severe irritant (rabbit)
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:	Breathing in dust may result in respiratory irritation.
Specific Target Organ Toxicity (STOT) – repeated exposure:	No data
Aspiration hazard:	Not expected to be a hazard.

Section 12 – Ecological Information

Ecotoxicity: Toxicity Effects: Highly Toxic for fish, not considered to be toxic for bacteria.

Air Pollution: 50mg/m³ for a mass emission >0.5Kg/h

Toxicity to fish mortality LC50 - *Leuciscus idus melanotus* - 440 mg/l - 48 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates: static test - *Daphnia magna* (Water flea) - 1,535mg/l - 24h

Persistence and Degradability: Log Pow: -1.72 : Easily Biodegradable

Mobility: No data is available for this material.

Environmental Fate: Do NOT let product reach waterways, drains and sewers.

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:

Serious Eye Damage/Irritation - Category 2A
Skin Corrosion/Irritation - Category 2
Specific Target Organ Toxicity (Single Exposure) - Category 3

Hazard Statement(s):

H319 Causes serious eye irritation.
H315 Causes skin irritation.
H335 May cause respiratory irritation.

Poisons Schedule (SUSMP): Not Scheduled

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

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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;
LD₅₀	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 13

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.