

Section 1 – Identification of the Material and Supplier

Product Name: Evopure Phosphate Remover
Other Name: Starver
Product Use: A phosphate reduction treatment suitable for use in swimming 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.

SUSMP Classification: Not Scheduled
GHS Hazard Category: Skin irritation (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

GHS Signal word: WARNING



HAZARD STATEMENTS:

H315 Causes skin irritation.
H319 Causes serious eye 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

P260 Do not breathe mist/vapours.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

RESPONSE

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P321 Specific treatment (see supplemental first aid instructions on this label).
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

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
Lanthanum chloride	10025-84-0	<20%	H302;H315;H318;H319;H335; H402

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: Rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek medical advice.

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.

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:

Advice to Doctor: 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: May cause irritation of the digestive tract. May be harmful if swallowed..

Eye contact: Causes eye irritation.

Skin contact: Causes skin irritation. May be harmful if absorbed through the skin.

Inhalation: Inhalation of mists or aerosols will result in respiratory irritation.

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 liquid. Decomposition compounds resulting: Hydrogen chloride gas, Lanthanum oxides.

Special Protective Precautions & Equipment for Fire Fighters: Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of decomposition.

Hazchem Code: Not applicable.

Section 6 – Accidental Release Measures

Emergency Procedures / Environmental Precautions: Clear area of all unprotected personnel. Do not allow product to enter drains, sewers, waterways or soil. If contamination of drains has occurred, advise the 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 vapour. Contain spilled product using absorbent (soil or sand). Prevent run off into drains, sewers waterways or soil. Collect and seal in properly labelled drums ready for appropriate disposal. Dilute remaining product with water, then carefully neutralize with lime. For large spills notify local emergency services.

Section 7 – Handling and Storage

Precautions for Safe Handling: Irritant liquid. Ensure an eye bath and safety shower are available and ready for use. Use only in a well-ventilated area. Prevent the build-up of mists in the work atmosphere. Avoid inhalation of mists, and skin or eye contact. Wear appropriate protective equipment to prevent inhalation, skin and eye contact when mixing and using. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet. Keep containers sealed when not in use.

Conditions for Safe Storage: Store in a cool, dry, well ventilated place and out of direct sunlight. Protect from moisture. Do not store with 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: No value assigned for this specific material by Safe Work Australia.

Appropriate Engineering Controls: Ensure ventilation is adequate and that air concentrations of components are controlled below quoted 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



Wear overalls, chemical goggles and impervious gloves. 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

Appearance:	Clear mobile fluid. No apparent odour.
Flammability:	Product is NOT flammable.
Melting Point:	NA
Boiling Point:	Unknown
Flash Point:	NA
Vapour Pressure:	Unknown.
Volatiles:	Nil

Vapour Density:	Unknown.
pH as Supplied	4.0-5.0
Specific Gravity:	1.00-1.15
Solubility in water:	Soluble

Section 10 – Stability and Reactivity

Chemical Stability: Stable under normal conditions of storage and handling.

Conditions to Avoid: Heat-sensitive, avoid exposure to extreme heat and high temperatures. Avoid sources of ignition.

Incompatible Materials: Avoid contact with unalloyed steels, galvanized or aluminium surfaces. Do not expose to chlorite, hypochlorite, sulphite, sodium hydroxide, alkalis, oxidizing agents and cyanides. Keep away from all foodstuffs.

Hazardous Decomposition Products: Hydrogen chloride gas.

Hazardous Reactions: Strong aqueous solutions of the product will readily react with sodium hydroxide and other alkali to form a thick slippery paste or gel. When involved in a fire, the product will undergo thermal decomposition to produce hydrogen chloride gas.

Section 11 – Toxicological Information

Lanthanum salts	Oral LD50 (Rat):4200mg/kg; Dermal Rat LD50 : 4184mg/ kg
Acute toxicity:	Not expected to be toxic.
Skin corrosion/irritation:	May be an irritant.
Serious eye damage/irritation:	May be an irritant.
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:	Mists may be an irritant.
Specific Target Organ Toxicity (STOT) – repeated exposure:	No data
Aspiration hazard:	Not expected to be a hazard.

Section 12 – Ecological Information

Ecotoxicity: No data available.

Acute Toxicity: No data available.

Persistence and Degradability: No data available

Mobility: No data available

Environmental Fate (Exposure): No Data Available

Bioaccumulative Potential: 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:

Skin irritation (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

Hazard Statement(s):

H315 Causes skin irritation.
H319 Causes serious eye 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

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 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.