

Section 1 – Identification of the Material and Supplier

Product Name: Evopure Fast Flocc
Other Name: Liquid Flocculent
Product Use: Swimming pool water flocculent.
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

Not classified as dangerous according to criteria of SAFEWORK Australia.

Not classified as dangerous according to criteria of ADG.

SUSMP Classification: Not Scheduled
GHS Hazard Category: Aquatic Acute 3- Hazardous to the aquatic environment
Aquatic Chronic 3- Hazardous to the aquatic environment

GHS Signal word: None

HAZARD STATEMENTS:

H335 May cause respiratory irritation.
H402 Harmful to aquatic life.
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.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ eye protection/ face protection.
P273 Avoid release to the environment.

RESPONSE

P362 Take off contaminated clothing and wash before reuse.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P370 + P378 Not combustible. Use extinguishing media suited to burning materials.

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
2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer	26062-79-3	<5%	H402 ; H412
Aluminium chloride basic	1327-41-9	<5%	H335

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: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Check breathing and pulse. Place victim in the recovery position, cover and keep warm. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention. Rinse mouth and then drink plenty of water.

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

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

Inhalation: If conscious place in a safe sitting or recovery position. Keep the casualty at rest. Move to fresh air. Seek medical attention if you feel unwell or if exposure prolonged.

Medical attention or special treatment required: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Section 5 – Fire Fighting Measures

Suitable Extinguishing Media: Water spray, dry powder, foam.

Hazards from Combustion Productions: Non-combustible liquid. Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire. Do not release chemically contaminated water into drains, soil or surface water. Sufficient measures must be taken to retain the water used for extinguishing. Dispose of contaminated water and soil according to local regulations.

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 (COx) & NOx evolved.

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: 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

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

waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled drums ready for appropriate disposal. For large spills notify local emergency services.

Section 7 – Handling and Storage

Precautions for Safe Handling: Avoid skin and eye contact and breathing in vapour, mists and aerosols. Safety showers and eye wash facilities should be provided in areas where accidental exposure is foreseeable. High risk of slipping due to leakage/spillage of product. Keep away from steel, copper, zinc and silver.

Conditions for Safe Storage: Keep in original containers, tightly sealed when not in use. Store in a well-ventilated place and out of direct sunlight. Protect from frost. Check area 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: Material is acidic in nature, use only stainless steel, or polyethylene.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

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:	Pink-red clear liquid.
Flammability:	Product is NOT flammable.
Melting Point:	NA
Boiling Point:	100°C
Flash Point:	NA
Vapour Pressure:	Unknown.
Volatiles:	95%
Vapour Density:	Unknown.
pH as Supplied	3.0-5.0
Specific Gravity:	1.00-1.10
Solubility in water:	Indefinitely dilutable

Section 10 – Stability and Reactivity

Chemical Stability: Non-reactive under normal conditions of use, storage and transport.

Chemical Reactivity: Stable under normal conditions.

Conditions to Avoid: Avoid excessive temperatures. Avoid freezing.

Incompatible Materials: Strong acids, strong bases, strong oxidizing agents.

Hazardous Decomposition Products: Hydrogen chloride. Oxides of aluminium.

Section 11 – Toxicological Information

Aluminium Chloride basic	Acute Oral Toxicity (rat) LD50 : 681mg/kg
2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer	Type of value: LD50 (rat) : > 5,000 mg/kg
Acute toxicity:	Not expected to be toxic (LD50 (Rat) >2000mg/Kg)
Skin corrosion/irritation:	Expected to be an oral irritant only.
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:	No data
Specific Target Organ Toxicity (STOT) – repeated exposure:	No data
Aspiration hazard:	Not expected to be a hazard.

Section 12 – Ecological Information

Ecotoxicity: Toxicity to fish: 96h/LC50 : > 10-100mg/l (for the polymer component of this product)

Toxicity to aquatic invertebrates: 48h/EC50 : > 10-100mg/l (for the polymer component of this product)

Toxicity to aquatic plants : not tested

Toxicity to micro organisms: not tested

Assessment of aquatic toxicity

Polyaluminium Chloride : The unneutralised product is expected to be toxic to fish

Acute Toxicity:

Fish –Danio rerio (Zebra Fish (OECD 203)	96h/LC50 : > 10-100mg/l
Aquatic invertebrate –Daphnia magna (Water Flea) (OECD 202)	48h/EC50 : > 10-100mg/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: Not readily biodegradable (by OECD criteria).

Mobility: Adsorption to solid soil phase is expected.

Environmental Fate (Exposure): No Data Available

Bioaccumulative Potential: Does not bioaccumulate.

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: Not classified as hazardous according to criteria of SAFEWORK Australia.

Classification of the Substance or Mixture:

Aquatic Acute 3- Hazardous to the aquatic environment
Aquatic Chronic 3- Hazardous to the aquatic environment

Hazard Statement(s):

H335 May cause respiratory irritation.
H402 Harmful to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

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.