

SAFETY DATA SHEET



PRODUCT : **ALGAEBAN**

ECOCLEAN UTILITY AGENCIES PTY LTD

Section 1 – Identification

Product Identifier

Product name	ALGAEBAN
Chemical name	Not Applicable
Synonyms	Product code: UBALGAEBAN
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Applicable
CAS number	Not Applicable

Recommended use of the chemical and restrictions on use

Relevant identified uses	Moss and algae control.
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Details of the manufacturer or importer

Registered company name	ECOCLEAN UTILITY AGENCIES
Address	26 NOTAR DRIVE ORMEAU QLD 4208
ABN	72 135 037 160
Telephone	07 5549 3666
email	info@ecocleanavantichem.com.au
Emergency phone number	Poisons Information Centre: Phone 13 11 26

Emergency Telephone Number

Association / Organisation	Poisons Information Centre
Emergency telephone number	13 11 26
Other emergency telephone numbers	In an emergency telephone 000, for fire, police and ambulance.

Section 2 – Hazard(s) Identification

Classification of the substance or mixture

Poisons Schedule	S5 (QUATERNARY AMMONIUM COMPOUNDS >5%)
GHS Classification	Skin Corrosion – Category 2 Eye Damage - Category 1 Acute Aquatic Toxicity - Category 2

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Label elements

GHS label pictograms



Signal word **DANGER**

Hazard statement(s)

- | | |
|-------------|----------------------------|
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H401 | Toxic to aquatic life. |

Precautionary statement(s): General

- | | |
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| 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. |

Precautionary statement(s): Prevention

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| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/eye protection/face protection. |

Precautionary statement(s): Response

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| 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. |
| P310 | Immediately call a POISON CENTRE or doctor/physician. |
| P321 | Specific treatment (see First Aid Measures on Safety Data Sheet) |

Precautionary statement(s): Storage

Precautionary statement(s): Disposal

Note

IMPORTANT This SDS and the Hazard Classifications contained therein, only apply to the product in its concentrated form, as supplied.
When diluted to 1:5 or greater with water, they no longer apply.

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However, good hygiene and housekeeping practices should be adhered to.

Section 3 – Composition and Information on Ingredients

Ingredient	CAS Name	Proportion
Quaternary ammonium compounds	63449-41-2	< 10 % w/w
Alcohol ethoxylate	68439-50-9	< 10% w/w
Non-Hazardous ingredients (water softeners, dyes)	Mixture	< 10% w/w
Water	7732-18-5	>60%

NOTE: Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication "List of Designated Hazardous Substances" or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication "Approved Criteria for Classifying Hazardous Substances", or have been found NOT to meet the criteria of a dangerous substance as defined in the GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS), 4th edition United Nations 2011. Listed ingredients may be below the cut-off concentrations for classification as hazardous, but are listed for information purposes and for additive effects.

Section 4 – First Aid Measures

Description of necessary first aid measures

Eye Contact	If this product comes in contact with eyes: <ul style="list-style-type: none">Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.Seek medical advice.
Skin contact	If skin contact occurs: <ul style="list-style-type: none">Remove / take off immediately all contaminated clothingRinse skin with water/showerWash contaminated clothing before reuse
Inhalation	<ul style="list-style-type: none">Remove victim to fresh air and keep at rest in a position comfortable for breathingIf respiratory symptoms: Immediately call POISON CENTER or doctor.Treat symptomatically.
Ingestion	<ul style="list-style-type: none">Rinse mouth.Do NOT induce vomiting.

Symptoms caused by exposure

	<ul style="list-style-type: none">Causes skin irritation.Causes serious eye damage.
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Medical attention and special treatment

	Treat symptomatically
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Section 5 – Fire Fighting Measures

Suitable extinguishing equipment / media

	<ul style="list-style-type: none">Use an extinguishing media suitable for surrounding fires.
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- Water spray or fog.
- Foam.
- Dry Chemical Powder
- BCF (where allowed)
- Carbon dioxide

Special hazards arising from the chemical

Fire incompatibility No known incompatibility.

Special protective equipment and precautions for fire fighters

- | | |
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| Fire Fighting | <ul style="list-style-type: none"> • Alert Fire Brigade and tell them the location and the nature of the hazard. • Wear full body protective clothing with breathing apparatus. • Prevent spillage from entering drains or watercourse. • Keep away from hot containers. • Cool hot containers with water spray. |
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| Fire/Explosion Hazard | <ul style="list-style-type: none"> • Non-combustible • Not considered to be a considerable fire risk. • Containers may explode on heating. • May emit acid smoke. • May emit corrosive fumes. • Decomposition may product toxic fumes of decomposition. |
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Section 6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

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| Minor spills | <ul style="list-style-type: none"> • Clean up spills immediately. • Avoid contact with skin and eyes. • Use Personal Protective Equipment. • Contain and absorb spill with vermiculite or other suitable material. • Sweep or wipe up. • Place in a suitable container for disposal. |
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| Major spills | <ul style="list-style-type: none"> • Clear area of personnel. • Use Personal Protective Equipment. • Prevent spill from entering drains or watercourse. • If contamination occurs contact emergency services. • Contain and absorb spill with vermiculite or other suitable material. • Label collected material for disposal. • Decontaminate if necessary (see section 13). • Launder and clean all protective equipment prior to being re-used. |
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Environmental precautions

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- Use appropriate containment to avoid environmental contamination.
- Prevent from spreading and entering waterway using sand, earth or other appropriate barriers.
- DO NOT DISCHARGE BULK QUANTITIES INTO DRAINS, WATERWAYS, SEWER OR ENVIRONMENT.
- Inform local authorities if this occurs.

Methods and materials for containment and cleaning up

Personal protective equipment advice is contained in Section 8 of the SDS

Section 7 – Handling and Storage

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> • Wear prescribed protective clothing. • Do NOT eat, drink or smoke when handling. • Wash hands after use. • Keep containers closed tightly when not in use. • Store in accordance to manufacturers instructions.
Other information	<ul style="list-style-type: none"> • Store in original containers. • Store in a cool, dry, well ventilated area out of direct sunlight.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> • Not to be transported in unlined metal drums. • Lined metal can, lined metal pail/can. • Plastic pail. • Polyliner drum. • Packaging as recommended by manufacturer.
Storage incompatibility	<ul style="list-style-type: none"> • No known incompatibilities.

Section 8 – Exposure controls and personal protection

Control parameters

Occupational Exposure Limits (OEL)	See Ingredients Data and Emergency Limits below.
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Ingredients data

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
not available	not available	not available	not available	not available	not available	not available

Emergency limits

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
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not available				
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IDLH data

Ingredient	Original IDLH	Revised IDLH
Not available	Not available	Not available

Exposure controls

Appropriate engineering controls	<ul style="list-style-type: none"> Use in a well ventilated area. General exhaust is adequate under normal operating conditions.
Personal protection	<div style="text-align: center;"> </div> <ul style="list-style-type: none"> Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure.
Eye and face protection	<ul style="list-style-type: none"> The use of safety glasses with side shield protection, goggles or face shield is recommended to handle in quantity, cleaning up spills, decanting, etc. Contact lenses pose a special hazard ; soft lenses may absorb irritants and all lenses concentrate them.
Skin protection	<ul style="list-style-type: none"> See hand protection below
Hand protection	<ul style="list-style-type: none"> Wear chemical protective gloves, e.g. PVC for applications with the concentrated product in quantity, cleaning up spills, decanting, or extended contact.
Body protection	<ul style="list-style-type: none"> Wear safety footwear. Work clothes.
Respiratory protection	<ul style="list-style-type: none"> Generally not required to handle the product as per label directions.
Other protection	<ul style="list-style-type: none"> Ensure there is access to eye washes and safety showers.
Thermal hazards	<ul style="list-style-type: none"> Not Available

Section 9 – Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Blue non-viscous liquid.
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Physical state	Liquid	Relative density (water=1)	1.02 @ 25°C
Odour	Faint	Partition coefficient n-octanol/water	Not available
Odour threshold	Not applicable	Auto-ignition temperature (°C)	Not flammable
pH (as supplied)	9.5 – 10.5	Decomposition temperature	Not available
Melting Point / Freezing	Approximately 0°C	Viscosity (cSt)	Not available

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Point (°C)			
Initial boiling point and boiling range (°C)	Approximately 100 °C	Molecular weight (g/mol)	Not available
Flash point (°C)	not flammable	Taste	Not available
Evaporation rate	not available	Explosive properties	none
Flammability	non flammable liquid	Oxidising properties	Not available
Upper Explosive Limit (%)	none	Surface Tension (dyn/cm or mN/m)	Not available
Lower Explosive Limit (%)	none	Volatile Component (%vol)	Approx. 90% v/v
Vapour pressure (kPa)	Not available	Gas group	Not applicable
Solubility in water (g/L)	Miscible in all proportions	pH as a solution (1%)	8.5 – 9.5
Vapour density (Air=1)	Not determined	Volatile organic compounds (VOC)	0%

Section 10 – Stability and Reactivity

Reactivity	Stable at normal temperatures and pressure.
Chemical stability	Stable at normal temperatures and pressure.
Possibility of hazardous reactions	Not expected.
Conditions to avoid	No special requirements.
Incompatible materials	Reducing agents. Oxidizing agents.
Hazardous decomposition products	Upon burning, may emit fumes.

Section 11 – Toxicological Information

Information on toxicological effects

Inhaled	Inhalation of mists or aerosols can produce mucous membrane and respiratory irritation.
Ingestion	This material may cause irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting, sore throat, abdominal pain and diarrhea.
Skin contact	Concentrated solutions may cause mild irritation. Symptoms include redness, itching and swelling.
Eyes	A severe eye irritant capable of causing severe conjunctivitis. Corneal damage may develop, with possible impairment of vision, if not promptly and adequately treated.
Chronic	Prolonged and repeated skin contact with diluted solutions may induce dermatitis.

Individual constituents

QUATERNARY AMMONIUM COMPOUNDS

Acute Toxicity	Acute oral toxicity (LD50): 240 mg/kg [Rat].	Carcinogenicity	Not listed as a carcinogen NTP, IARC, OSHA, EPA.
Skin Irritation/Corrosion	Skin – moderate irritant (rabbit)	Reproductivity	No data available

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	Eyes – severe irritant (rabbit)		
Serious Eye Damage/Irritation	YES	STOT – Single Exposure	No data available
Respiratory or Skin sensitivity	YES	STOT – Repeated Exposure	No data available
Mutagenicity	No data available	Aspiration Hazard	No data available

Alcohol ethoxylate			
Acute Toxicity	LD50 Oral Rat - Male, Female 1200 mg/kg	Carcinogenicity	Not listed as a carcinogen NTP, IARC, OSHA, EPA.
Skin Irritation/Corrosion	LD50 Dermal Rat - Male, Female >2000 mg/kg	Reproductivity	No data available
Serious Eye Damage/Irritation	EYE IRRITATION: Severe eye irritant	STOT – Single Exposure	No data available
Respiratory or Skin sensitivity	No data available	STOT – Repeated Exposure	No data available
Mutagenicity	No data available	Aspiration Hazard	No data available

Section 12 – Ecological Information

Aquatic Toxicity	
ALGAEBAN (as sold)	Acute Aquatic Toxicity (Calculated) LC50: 5 mg/L. Acute Aquatic Toxicity Cat 2 – Toxic to aquatic life. LC50 >1mg/L , but < 10mg/L.
ALGAEBAN (at use dilution 1:100 rinse)	Acute Aquatic Toxicity (Calculated) LC50: 500 mg/L. Acute Aquatic Toxicity NOT HAZARDOUS – Not harmful to aquatic life. LC50 > 100mg/L.
Ingredients:	
Quaternary Ammonium Compound	(Fish) LC50 96hr 0.75mg/L
Alcohol, ethoxylated (non-ionic surfactant)	(Fish) LC50 96hr 1.1 – 3.0mg/L

Persistence and degradability		
Ingredient	Persistence: Water/Soil	Persistence: Air
Quaternary Ammonium Compound	Readily biodegradable. >60% BOD, 28 days, Closed Bottle Test (OECD 301D). >70% BOD, 28 days, Closed Bottle Test (OECD 306). Biodegradable in sea water.	Not Available
Alcohol ethoxylate	Readily biodegradable. >60% BOD, 28 days, Closed Bottle Test (OECD 301D). >70% BOD, 28 days, Closed Bottle Test (OECD 306). Biodegradable in sea water.	Not Available

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Bioaccumulative potential

Ingredient	Bioaccumulation
Quaternary Ammonium Compound	No bioaccumulation is expected. LOW (LogKOW = -1.38)
Alcohol ethoxylate	No bioaccumulation is expected.

Mobility in soil

Ingredient	Mobility
Quaternary Ammonium Compound	Due to its physico-chemical characteristics, highly mobile in the environment and will partition to the aquatic compartment.
Alcohol ethoxylate	Due to its physico-chemical characteristics, highly mobile in the environment and will partition to the aquatic compartment.

Section 13 – Disposal considerations

Waste treatment methods

Product and Packaging Disposal	Recycle wherever possible or consult manufacturer for recycling options. Consult state land waste authority for disposal. Bury or incinerate residue at the approved site. Recycle containers if possible, or dispose of in an authorised landfill.
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Section 14 – Transport Information

Labels Required

Transport pictogram	None Allocated
Marine Pollutant	None Allocated
HAZCHEM	None Allocated

Land Transport (ADG)

UN Number	None Allocated
Packing Group	None Allocated
UN Proper shipping name or Technical name	None Allocated
Environmental hazard	No relevant data
Transport hazard class(es)	None Allocated
Special Precautions for user	None Allocated None Allocated
Additional information	Not Available

Section 15 – Regulatory Information

Health, safety and environment regulations

Poisons Schedule	S5 (QUATERNARY AMMONIUM COMPOUNDS >5%)
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Section 16 – Other Information

Section 16 – Other Information	
Issue Date	24 th June 2016
Version Number	1.0
Abbreviations and acronyms	<ul style="list-style-type: none"> ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail. AICS: Australian Inventory of Chemical Substances. CAS Number: Chemical Abstracts Service Registry Number. GHS: Globally Harmonized System of Classification and Labelling of Chemicals HAZCHEM: An emergency action code of numbers and letters which gives information to emergency services. HSIS: Hazardous Substances Information System IARC: International Agency for Research on Cancer. NOHSC: National Occupational Health and Safety Commission. NTP: National Toxicology Program (USA). SDS: Safety Data Sheet STEL: Short Term Exposure Limit. SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons. TWA: Time Weighted Average. UN Number: United Nations Number.
Literature references	<ul style="list-style-type: none"> Preparation of Safety Data Sheets for Hazardous Chemicals – Code of Practice (December 2011 – Safe Work Australia) GHS Hazardous Chemical Information List (September 2014 – Safe Work Australia) Guidance on the Classification of Hazardous Chemicals under the WHS Regulations. April 2012. Safe Work Australia. Global Harmonized System of Classification and Labelling of Chemicals (GHS). Fifth revised edition. “Australian Exposure Standards” List of Designated Hazardous Substances [NOHSC:10005(1999)] Australian Code For The Transport Of Dangerous Goods By Road And Rail – 7th Edition. Standard for the Uniform Scheduling of Medicines and Poisons 2015. Material Safety Data Sheets – individual raw materials – Suppliers. Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)] HSIS – Hazardous Substance Information System – National Worksafe Data Base. LABELLING OF WORKPLACE HAZARDOUS CHEMICALS, Code of Practice, DEC 2011 IMPLEMENTATION OF THE GLOBALLY HARMONISED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS (GHS) APRIL 2012
Risk assessments	This SDS is a tool to communicate hazards which can assist you in creating relevant risk assessments for your workplace. There are many variables in determining whether a

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	particular hazard is a risk in your workplace. Keep in mind this may be influenced by such things as the amount used, frequency of use, engineering controls, effectiveness of safety training and many more considerations.
Disclaimer	This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since UTILITY ECOCLEAN cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier.
Copyright	This document is copyright.

End of SDS

Document Revision History

Revision Version #	Date	Reason for revision
Draft		GHS format
1.0	24.06.2016	Review by Tuwai Specialties. tuwai.wt@bigpond.com