

SECTION 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Chemical Nature:	Aluminium Sulphate		
Trade Name:	AQUATIC CLEAR DROP DAMS		
SUPPLIER:	Aquatic Technologies		
ADDRESS:	41 Yazaki Way Carrum Downs VIC 3201, Australia		
TELEPHONE	+61 3 9071 2442	FAX:	
Substance:	Crystals/Granules/Powder	Product Use:	Flocculation of Dam Water
This version issued:	December 2019	Up for revision:	December 2024
In case of Emergency:	13 11 26 – Poisons Information Centre		

SECTION 2 – HAZARDS IDENTIFICATION

Classification of the substance or mixture	
<ul style="list-style-type: none"> This product is classified as HAZARDOUS according to the criteria of SWA The product is classified as HAZARDOUS according to the criteria of GHS This product is a NON-DANGEROUS GOOD according to Australian Dangerous Goods (ADG) Code 	
GHS – GLOBALLY HARMONISED SYSTEM	
GHS Classification	Acute Toxicity (oral) - category 4 Skin Corrosion/Irritation – category 2 Serious eye damage/irritation – category 2A Corrosive metals - category 1 Acute Toxicity (inhalation) - category 4
GHS Pictogram	
GHS Signal Word	WARNING
Hazard Statement(s)	
H302:	Harmful if swallowed
H315:	Causes skin irritation
H319:	Causes serious eye irritation
H290:	May be corrosive to metals
H332:	Harmful if inhaled
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+P270:	Wash hands thoroughly after use. Do not eat, drink or smoke when using this product
P280:	Wear protective gloves/eye protection/face protection
P234:	Keep only in original container
P261:	Avoid breathing dust/fume/gas/mist/vapours/spray
P271:	Use only outdoors or in a well-ventilated area
Response	
P301+P312:	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+352:	IF ON SKIN: Was with plenty of soap and water
P312:	Call a POISON CENTER or doctor/physician if you feel unwell
P321:	Specific measures (see ... on this label)
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
P390:	Absorb spillage to prevent material damage
P304+P340:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Storage	
P406:	Store in corrosive resistant/ container with a resistant inner liner
Disposal	
P501:	Dispose of contents/container in accordance with local regulations
EMERGENCY OVERVIEW	
Colour:	White
Odour:	Odourless
Physical Description:	Crystals/Granules/Powder
Major Health Hazards:	Not available

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients:	CAS Number:	Proportion	Hazard Codes
Aluminium Sulphate	10043-01-3	100%	H290, H302, H315, H319, H332

SECTION 4 – FIRST AID MEASURES

Scheduled Poisons: Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 0800 764 766).

First Aid Facilities: Ensure there is access to eye washes and safety showers.

Ingestion: Immediately rinse mouth with water. DO NOT induce vomiting. Seek medical attention. Ingested material is not easily absorbed. It reacts with phosphate, forming an insoluble compound which is readily passed out of the body.

Inhalation: Remove the source of contamination or move the victim to fresh air; 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 attention.

Skin Contact: Remove all contaminated clothing. Wash skin gently and thoroughly with copious amounts of water. If irritation occurs, seek medical attention.

Eye Contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Seek immediate medical attention.

Ingestion: If swallowed, rinse mouth thoroughly with water and contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Give activated charcoal if instructed.

Advice to Doctor: Ensure label is on hand. Treat symptomatically. All treatments should be based on observed signs and symptoms of distress of the patient. Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards:	Product is non-flammable. Forms aluminium oxide and Sulphur trioxide at temperatures above 650°C. Hazardous polymerization is not expected.
Extinguishing Media:	Foam, carbon dioxide, dry chemical powder
Fire Fighting:	Fire fighters should wear a self-contained breathing apparatus and full protective clothing along with protective equipment. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Flash point:	Product is non-flammable. It will decompose under fire conditions emitting toxic gases and vapours including oxides of Sulphur.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures:	<ul style="list-style-type: none"> Carefully vacuum/sweep up spill and place in suitable containers for reuse or disposal Do not allow product to enter drains, sewers, waterways or soil. If contamination of drains has occurred, advise the local emergency services For large spills, notify local emergency services
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SECTION 7 – HANDLING AND STORAGE

Handling:	Use only in a well-ventilated area. Avoid inhalation of dusts, and skin or eye contact. Wear appropriate PPE to prevent inhalation, skin and eye contact when mixing and using. Ensure 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.
Storage:	Air and moisture sensitive. Store in a cool, dry, well-ventilated area out of direct sunlight and away from heat, sources of ignition, oxidising agents and acids. Do not place near structural steel. Avoid dust formation. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Do not store with any foodstuffs.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501** set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Control Parameters

National Exposure Standards:	Aluminium Sulphate: No specific exposure standard. Aluminium soluble salts (as Aluminium): AU OEL: 2 mg/m ³
Biological Limit Values:	No data available
Appropriate Engineering Controls:	Select suitable materials for the construction of storage tanks, containers, pipe valves and fittings. Ensure adequate ventilation using a combination of natural and local or general exhaust as appropriate. Where dust is generated, particularly in enclosed areas, a local exhaust ventilation system, drawing dust away from workers' breathing zone is required. Keep containers closed when not in use in a well-ventilated area.

PERSONAL PROTECTION EQUIPMENT (PPE)

Eye Protection:		Chemical splash goggles or safety glasses with side shields and a full-face shield as appropriate should be used
Skin Protection:	  	Protective cotton overalls, buttoned at the neck and wrists. Wear elbow-length gloves of impervious material
Protective Material Types:		PVC or rubber
Respirator:		If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable particulate/dust filter should be used

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical Description and Colour:	White lustrous crystals, granules or white powder. This anhydrous salt is hygroscopic (absorbs moisture from the air)
Odour:	Odourless
Boiling Point:	770°C (decomposes)
Freezing / Melting Point:	Not available
Volatiles:	Not available
Vapour Pressure:	Not available
Vapour Density:	Not available
Specific Gravity:	2.71 (at 25°C)
Water Solubility:	50% w/w
pH:	3.7
Coeff Oil/Water Distribution:	Not available
Evaporation Rate:	Not available
Odour Threshold:	Not available
Autoignition temp:	Not available
Additional Characteristics:	Insoluble in alcohol

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:	Reacts with alkali
Chemical Stability:	Stable under normal conditions of storage and handling
Conditions to Avoid:	Air and moisture sensitive. Keep containers sealed
Incompatibilities:	Avoid contact with mild steel. Keep away from all foodstuffs
Hazardous Decomposition Products:	Hazardous decomposition products include oxides of sulphur

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity	
LD50:	6207 mg/kg (mouse, oral)
LD50:	1930 mg/kg (rat, intraperitoneal)
Neurotoxicity:	Injection of aluminium salts directly into the brain of animals caused functional and structural damage
Inhalation:	Prolonged inhalation of 2 to 4 mg/m ³ of aluminium Sulphate caused scarring of upper lung tissue
Acute (short term)	
Ingestion:	May be harmful if swallowed. May cause abdominal pain, nausea and vomiting. Concentrated solutions (over 20%) can cause burns of the mouth, bleeding stomach, incoordination, muscle spasms and kidney damage
Eye:	Dusts can cause irritation and inflammation to the eyes, eye contact will cause tearing, stinging, blurred vision and redness. Corneal injury may occur if not washed off immediately. Concentrated solutions may cause severe eye damage
Skin:	Dust and concentrated solutions can cause irritation especially to open cuts and wounds. Skin contact will cause redness and itchiness
Inhalation:	Dust forms sulphuric acid in contact with moisture in air or in tissues; they can cause sore throat, coughing and irritation of nose and throat. High dust concentrations may cause congestion and constriction of airways
Chronic (long term)	
Skin:	Repeated or prolonged exposure may cause irritation and numbing of the fingers
Ingestion:	Repeated ingestion of this product may cause phosphate deficiency which can weaken bones

SECTION 12 – ECOLOGICAL INFORMATION

No data available

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with all local, state and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

UN Number: None allocated
UN Proper Shipping Name: Aluminium Sulphate
Hazchem Code: N/A
Dangerous Goods Class: None allocated
Subsidiary Risk: None allocated
Packaging Group: Non allocated
Special Precautions for User: Irritant

SECTION 15 – REGULATORY INFORMATION**Labeling Details**

GHS Classification	Acute Toxicity – oral category 4 Skin Corrosion/Irritation – category 2 Serious eye damage/irritation – category 2A Corrosive metals - category 1 Acute Toxicity – inhalation category 4
Poison Schedule:	Not available
EPG:	Not available
AICS	Sulphuric acid, aluminium salt (3:2)

SECTION 16 – OTHER INFORMATION

This SDS contains only safety-related information. For other data see product literature

Date of Last Revision

AT199v1.1 - 15/12/18

Acronyms

ADG CODE	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AIC S	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
HSIS	Hazardous Substances Information System
IARC	International Agency for Research on Cancer
NICNAS	The National Industrial Chemicals Notification and Assessment Scheme
NOHSC	National Occupation Health and Safety Commission
NTP	National Toxicology Program (USA)
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (Feb 2016)

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END OF SDS