



Aluminium Sulphate

AGent

AGent SDS: Aluminium Sulphate [2026.02]

Version No: 2026.02

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Hazard Alert Code: 2

Issue Date: July 2026
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AGENT.GHS.AUS.EN.E

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier

Product name	Aluminium Sulphate
Chemical Name	Aluminium sulphate
Synonyms	Alum flocc; AlFloc; Crystal Quick; sulphuric acid aluminium salt
Proper shipping name	ALUMINIUM SULPHATE (solid — Not classified as a Dangerous Good)
Chemical formula	$\text{Al}_2(\text{SO}_4)_3$ (solid)
Other means of identification	Aluminium Sulphate [2026.02]

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Swimming pool chemical; water flocculant.
Uses advised against	Not for food, beverage, pharmaceutical or cosmetic applications; not for human consumption.

Details of the manufacturer or supplier of the safety data sheet

Registered company name	AGent Sales & Services Pty Ltd
Address	38 May Holman Drive, Bassendean WA 6054, Australia
Telephone	(+61 8) 6270 4500 / 1300 833 844
Website	agentsales.com.au
Email	admin@agentsales.com.au

Emergency telephone number

Association / Organisation	Hazrad (outside 24-hour emergency response provider)
Emergency telephone numbers	08 9418 4200 (24-hour) — answered by Hazrad on AGent's behalf
Other emergency telephone numbers	Poisons Information Centre 131 126 (Australia) / 0800 764 766 (NZ)

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. NOT a Dangerous Good. Classified as a serious eye irritant under the GHS (per the Safe Work Australia HCIS determination for CAS 10043-01-3); not classified as a Dangerous Good under the ADG Code.

Poisons Schedule (SUSMP)	Not Scheduled (SUSMP — none allocated)
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Classification

- Serious Eye Damage/Eye Irritation Category 2A — H319

Label elements

Hazard pictogram(s)	
Signal word	WARNING

Hazard statement(s)

- H319 — Causes serious eye irritation.

Supplementary statement(s)

Not Applicable

Precautionary statement(s) Prevention

- P280 — Wear eye protection / face protection.
- P264 — Wash hands thoroughly after handling.

Precautionary statement(s) Response

- 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.
- P362+P364 — Take off contaminated clothing and wash it before reuse (if dust-contaminated).

Precautionary statement(s) Storage

- P234 — Keep only in original container. Store in a cool, dry place.

Precautionary statement(s) Disposal

- P501 — Dispose of contents/container in accordance with local, state and federal regulations.

Other hazards

Dust explosion hazard if dispersed in air. Corrosive to damp metals.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures.

Mixtures

CAS No.	% [weight]	Name	Classification
10043-01-3	> 99.5	Aluminium sulphate	Eye Irrit. 2A (H319) — HCIS

SECTION 4 First aid measures

Description of first aid measures

Eye Contact

Check for and remove any contact lenses. Immediately rinse thoroughly with plenty of running water for at least 15 minutes, keeping eyelids open. If eye irritation persists, seek medical advice / attention.

Skin Contact

Wash off with soap and plenty of water. Consult a physician if irritation occurs.

Inhalation

If breathed in (dust), move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water; give a glass of water to drink. Seek medical advice. Contact the Poisons Information Centre (Australia 131 126; New Zealand 0800 764 766).

Most important symptoms and effects, both acute and delayed

Eye contact causes serious eye damage. Skin contact causes slight irritation. Ingestion irritates mucous membranes of the mouth, pharynx, oesophagus and GI tract. Dust may irritate the respiratory tract.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact the Poisons Information Centre (Australia 131 126; New Zealand 0800 764 766) for guidance.

First Aid facilities

Eye wash facilities and a safety shower must be available in any area where this product is handled.

SECTION 5 Firefighting measures

Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide appropriate to the surrounding fire.

Special hazards arising from the substance or mixture

Fire Incompatibility

On decomposition may emit sulphur oxides and aluminium oxide. Hydrolysis forms dilute sulphuric acid.

Advice for firefighters

Fire Fighting

Wear self-contained breathing apparatus (SCBA) if necessary.

Fire / Explosion Hazard

Non-combustible solid. Dust explosion hazard if dispersed in air.

HAZCHEM Code	None allocated
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SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See Section 8 for personal protective equipment requirements.

Use PPE. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate non-essential personnel.

Environmental precautions

Do not let product enter drains or waterways. See Section 12.

Methods and material for containment and cleaning up

Minor Spills

Pick up and arrange disposal without creating dust. Sweep up and shovel into suitable closed containers for disposal per Section 13.

Major Spills

Avoid dust generation. Collect into labelled containers for disposal per Section 13. Prevent entry to drains and waterways. Wear PPE.

SECTION 7 Handling and storage

Precautions for safe handling

Safe handling

Avoid formation of dust and aerosols. Provide exhaust ventilation where dust is formed. Use PPE per Section 8.

Other information

Store in the original container; keep tightly closed in a dry place.

Conditions for safe storage, including any incompatibilities

Suitable container

Store in the original container, tightly closed, in a cool, dry, well-ventilated place. Avoid contact with damp metals (corrosive when wet).

Storage incompatibility

Incompatible with strong oxidising agents and alkalis. Store away from incompatible materials (see Section 10).

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

Reference: Safe Work Australia, "Workplace Exposure Limits for Airborne Contaminants" (April 2024) by Safe Work Australia.

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
SWA WEL 2024	Aluminium, soluble salts (as Al)	Aluminium sulphate (component)	2 mg/m ³	Not assigned in SWA WEL 2024	Not assigned in SWA WEL 2024	Verified against SWA WEL 2024 (aluminium soluble salts as Al). AGent operates AU-only.
SWA WEL 2024	Inspirable dust (not otherwise specified)	Aluminium sulphate dust	10 mg/m ³ (inhalable dust, n.o.s.)	Not assigned in SWA WEL 2024	Not assigned in SWA WEL 2024	Dust-n.o.s. limit applied to the solid.

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3
Aluminium sulphate	Not established (DOE PAC)	Not established (DOE PAC)	Not established (DOE PAC)
Ingredient	Original IDLH	Revised IDLH	
Aluminium sulphate	Not established (NIOSH)	Not established (NIOSH)	

MATERIAL DATA

No whole-mixture occupational exposure data are available; manage on a per-component basis (above).

Exposure controls

Appropriate engineering controls

Apply the hierarchy of controls (WHS Reg 36). Where elimination or substitution is not reasonably practicable: provide local exhaust ventilation at points of vapour / mist generation; use closed transfer systems where possible; ensure general ventilation is adequate to keep airborne concentrations below the applicable WEL. Document the risk assessment supporting the chosen control hierarchy.

Individual protection measures, such as personal protective equipment

Eye and face protection

Safety glasses with side shields (AS/NZS 1336 & 1337) as a minimum. Chemical goggles and a face shield (AS/NZS 1336 & 1337) where splash potential exists.

Skin protection

See Hand protection below.

Hands/feet protection

Wear protective gloves (PVC or nitrile, per AS/NZS 2161) and protective clothing appropriate to the risk. Inspect gloves before use; dispose of contaminated gloves and wash hands. Safety glasses with side shields or goggles; P1 / P2 dust respirator where dust risk exists.

Body protection

See Other protection below.

Other protection

Long-sleeved chemical-resistant protective clothing and apron (PVC or equivalent)

Respiratory protection

If a risk assessment indicates an inhalation risk exists, wear a half-face or full-face respirator with appropriate filter (selection per AS/NZS 1715; respirator per AS/NZS 1716). Specific cartridge / canister recommendation to be confirmed during respiratory protection risk assessment per AS/NZS 1715.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

Property	Value
Appearance	Crystalline solid — white
Physical state	Solid (crystalline)
Odour	Odourless
Odour threshold	Not applicable — odourless
pH (as supplied)	Acidic in solution (~3.5 at 1%)
Melting point / freezing point (°C)	No data available in source SDS
Initial boiling point and boiling range (°C)	Not applicable — decomposes before boiling
Flash point (°C)	Not applicable — non-combustible solid
Evaporation rate	Not applicable — solid
Flammability	Not flammable
Upper Explosive Limit (%)	Not applicable (dust explosion hazard — see §10)
Lower Explosive Limit (%)	Not applicable (dust explosion hazard — see §10)
Vapour pressure (kPa)	Not applicable — solid
Solubility in water	1000 g/L @ 20 °C
Vapour density (Air = 1)	Not applicable — solid
Relative density (Water = 1)	2.71 g/mL @ 25 °C
Partition coefficient n-octanol/water	Not applicable — ionic compound
Auto-ignition temperature (°C)	Not applicable — non-combustible
Decomposition temperature (°C)	770 °C
Viscosity (cSt)	Not applicable — solid
Molecular weight (g/mol)	342.15 g/mol (anhydrous aluminium sulphate)
Taste	Not applicable — do not taste
Explosive properties	Dust explosion hazard if dispersed in air
Oxidising properties	None
Surface Tension (dyn/cm or mN/m)	Not applicable — solid
Volatile Component (% vol)	Not applicable — solid
Gas group	Not applicable
pH as a solution (1%)	Approximately 3.5 (1% solution)
VOC g/L	0 g/L — inorganic solid; no VOC

SECTION 10 Stability and reactivity

Reactivity	Corrosive to metals in the presence of water. See Section 7.
Chemical stability	Stable under normal ambient and anticipated storage and handling conditions.
Possibility of hazardous reactions	Corrosive to damp steel. Dust explosion hazard. Hazardous polymerisation will not occur.
Conditions to avoid	Dust generation; heat, sources of ignition and open flame.
Incompatible materials	See Section 7. Strong oxidising agents; alkalis.
Hazardous decomposition products	See Section 5. Sulphur oxides; dilute sulphuric acid via hydrolysis.

SECTION 11 Toxicological information

Information on toxicological effects

Inhaled

Dust may irritate the respiratory tract.

Ingestion

Irritation of mucous membranes in the mouth, pharynx, oesophagus and GI tract.

Skin Contact

Slight irritation.

Eye

Causes serious eye irritation (H319). Dust and concentrated dissolving material irritate the eye; hydrolysis in tear fluid is mildly acidic.

Chronic

No specific chronic-effect data for the product in the source SDS.

Per-ingredient toxicity

Ingredient	TOXICITY	IRRITATION
Aluminium sulphate	Oral LD50 (rat): > 5,000 mg/kg	Skin (rabbit): no irritation (4 h); Eye (rabbit): irritating / serious eye damage; non-mutagenic
Not applicable	Not applicable	Not applicable

Hazard checklist (whole-product classification basis)

Hazard endpoint	Classified	Hazard endpoint	Classified
Acute Toxicity	—	Carcinogenicity	—
Skin Irritation/Corrosion	—	Reproductive Toxicity	—
Serious Eye Damage/Irritation	✓	STOT — Single Exposure	—
Respiratory or Skin Sensitisation	—	STOT — Repeated Exposure	—
Mutagenicity	—	Aspiration Hazard	—

Legend: ✓ = Data available to make classification; — = Data either not available or does not fill the criteria for classification.

Information on possible routes of exposure

Absorbed by ingestion and inhalation (dust).

Additional Information

RTECS	BD1700000
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SECTION 12 Ecological information

Toxicity

Ingredient	Endpoint	Test Duration	Species	Value	Source
Aluminium sulphate	Toxic threshold (dissolved Al)	General	Fish (general)	Toxic from ~0.55 mg/L; very soft water ~0.1 mg/L	AGent SDS (aluminium compounds, general)
Aluminium sulphate	Toxic threshold	General	Daphnia magna	Toxic from ~136 mg/L (dissolved Al)	AGent SDS (general)

Environmental precaution: Prevent entry to drains, waterways and soak-aways. Notify the relevant Environmental Protection Authority if waterway contamination occurs.

Persistence and degradability

Ingredient	Persistence: Water / Soil	Persistence: Air
Aluminium sulphate	Not applicable in the OECD biodegradation sense — inorganic salt.	Not applicable — non-volatile solid (dust only).

	Hydrolyses to $\text{Al}(\text{OH})_3$ and dilute sulphuric acid.	
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Bioaccumulative potential

Ingredient	Bioaccumulation
Aluminium sulphate	Not expected to bioaccumulate (ionic compound; low bioconcentration).

Mobility in soil

Ingredient	Mobility
Aluminium sulphate	Soluble and mobile in water; precipitates as $\text{Al}(\text{OH})_3$ at neutral / alkaline pH. Low mobility in soil.

Other adverse effects

Toxic to aquatic organisms (acidic aluminium compounds). May depress pH and cause flocculation / mechanical damage to aquatic organisms. Avoid uncontrolled discharge to waterways.

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal

- Recycle wherever possible.
- Ensure waste disposal conforms to all relevant local, state and federal authority waste disposal regulations.
- Do NOT discharge into sewers or waterways.
- Empty containers should be returned via AGent's Closed Loop container return program where applicable.
- Whatever cannot be saved for recovery or recycling should be managed through an approved waste disposal facility.
- Neutralise / dilute residual material cautiously before disposal; ensure disposal conforms to local, state and federal regulations.

SECTION 14 Transport information

Labels Required	Not Applicable — Not a Dangerous Good
Marine Pollutant	No
HAZCHEM Code	None allocated

Land transport (ADG)

UN number	Not Applicable — Not classified as a Dangerous Good
UN proper shipping name	ALUMINIUM SULPHATE (solid — Not classified as a Dangerous Good)
Transport hazard class(es)	Not classified as a Dangerous Good by the criteria of the ADG Code for transport by road or rail
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special precautions for user	None allocated — Not a Dangerous Good (solid aluminium sulphate).
ERG / EIP number	Not Applicable — Not a Dangerous Good

Air transport (ICAO-IATA / DGR)

UN number	Not Applicable — Not classified as a Dangerous Good
UN proper shipping name (lowercase)	Aluminium sulphate (solid — Not classified as a Dangerous Good)
ICAO/IATA Class	Not classified as a Dangerous Good by the criteria of the IATA Code for transport by air
Packing group	Not Applicable
Environmental hazard	Not Applicable
Special provisions	Not Applicable — Not a Dangerous Good.
Cargo Only Packing Instructions	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.
Cargo Only Max Qty/Pack	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.
Passenger and Cargo Packing Instructions	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.
Passenger and Cargo Max Qty/Pack	Not Applicable — AGent does not transport this product by air. Refer to land transport (ADG) above for the applicable classification.

Sea transport (IMDG-Code / GGVSee)

UN number	Not Applicable — Not classified as a Dangerous Good
UN proper shipping name	ALUMINIUM SULPHATE (solid — Not classified as a Dangerous Good)
IMDG Class	Not classified as a Dangerous Good by the criteria of the IMDG Code for transport by sea
Packing group	Not Applicable
Environmental hazard	Not a Marine Pollutant
EMS Number	Not Applicable — Not a Dangerous Good
Special provisions	Not Applicable — Not a Dangerous Good.

Transport in bulk according to MARPOL Annex II and the IBC Code

Not Applicable — AGent does not transport this product in bulk by sea.

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
Aluminium Sulphate	Not Applicable — AGent does not transport this product in bulk by sea.

Transport in bulk in accordance with the IGC Code

Product name	Ship Type
Aluminium Sulphate	Not Applicable — AGent does not transport this product in bulk by sea.

SECTION 15 Regulatory information**Safety, health and environmental regulations / legislation specific for the substance or mixture**

ALUMINIUM SULPHATE (CAS 10043-01-3) is found on / assessed against the following regulatory lists:

- Australia Hazardous Chemical Information System (HCIS): Eye Irritation Category 2A (H319)
- Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): None allocated
- Australian Inventory of Industrial Chemicals (AIIC): Listed
- IARC Group classification: Not classified
- Schedule 10 of the model WHS Regulations (prohibited / restricted carcinogens): Not listed
- Schedule 14 of the model WHS Regulations (health monitoring trigger): Not listed

Additional Regulatory Information

Subject to: Work Health and Safety (General) Regulations 2022 (WA); "Workplace Exposure Limits for Airborne Contaminants" (April 2024) by Safe Work Australia; Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code) current edition.

National Inventory Status

Country / Inventory	Listed
Australia (AIIC / AICS)	Yes
Canada (DSL)	Not applicable — AGent does not export this product
Canada (NDSL)	Not applicable — AGent does not export this product
China (IECSC)	Not applicable — AGent does not export this product
Europe (EINECS / ELINCS / NLP)	Not applicable — AGent does not export this product
Japan (ENCS)	Not applicable — AGent does not export this product
Korea (KECI)	Not applicable — AGent does not export this product
New Zealand (NZIoC)	Not applicable — AGent does not export this product
Philippines (PICCS)	Not applicable — AGent does not export this product
USA (TSCA)	Not applicable — AGent does not export this product
Taiwan (TCSI)	Not applicable — AGent does not export this product
Mexico (INSQ)	Not applicable — AGent does not export this product
Vietnam (NCI)	Not applicable — AGent does not export this product
Russia (FBEPH)	Not applicable — AGent does not export this product

Legend: Yes = All CAS declared ingredients are on the inventory; No = One or more CAS listed ingredients are not on the inventory (may be exempt or require registration).

SECTION 16 Other information

Revision Date	July 2026
Initial Date	June 2026 (AGent 2026 format)

SDS Version Summary

Version	Date of Update	Sections Updated
2026.02 (AGent 2026 format)	July 2026	§2 reclassified Eye Dam. 1 (H318, DANGER, GHS05) → Eye Irritation 2A (H319, WARNING, GHS07) by documented determination: aligns with the current SWA HCIS entry for CAS 10043-01-3 (H319 only), the current supplier solid SDS (not classified as hazardous) and the Solution Rev 2026.03 (H315/H319); resolves the GHS bridging contradiction with the Aluminium Sulphate Solution SDS (an Eye Dam. 1 substance at >99.5% would force the 20–40% solution to Category 1). Cascaded: pictogram, signal word, P-codes (P310 → P337+P313), §3/§4/§11/§15 wording. Applies to AquaGUARD Crystal CLEAR TAB and Crystal Quick via shared product group.
2026.01 (AGent 2026 format); V2.2 and earlier (legacy AGent format)	June 2026 (2026.01); March 2023 (legacy)	2026.01: reformatted from legacy V2.2 to AGent 2026 layout; §8 confirmed against SWA WEL 2024; classification carried over unchanged (Eye Dam. 1 / H318 / DANGER — inherited from the Chemwatch-lineage legacy source; superseded by the 2026.02 determination above).

Other information

This SDS is intended as a hazard communication tool to assist in workplace Risk Assessment. It is not an Australian Standard or a definitive document.

Definitions and abbreviations

Abbreviation	Definition
ADG	Australian Dangerous Goods Code
AICS / AIIC	Australian Inventory of Industrial Chemicals (formerly AICS)
AUH	Additional / Australian Hazard statements
BCF	Bioconcentration Factor
BEI	Biological Exposure Index
CAS	Chemical Abstracts Service Registry Number
DNEL	Derived No Effect Level
DSEN	Dermal sensitiser (SWA WEL 2024 notation)
EC50	Effect Concentration causing effect in 50% of test population
EMS	IMDG Emergency Schedule
ERG / EIP	Emergency Response Guide / Emergency Information Panel (SAA/SNZ HB76)
ES	Exposure Standard (legacy term — now WEL)
GHS	Globally Harmonised System of Classification and Labelling
HCIS	Hazardous Chemical Information System (Safe Work Australia)
IARC	International Agency for Research on Cancer
IDLH	Immediately Dangerous to Life or Health
LC50	Lethal Concentration causing death in 50% of test population
LD50	Lethal Dose causing death in 50% of test population
LOAEL	Lowest Observed Adverse Effect Level
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
OEL	Occupational Exposure Limit
OTO	Ototoxic (SWA WEL 2024 notation)
PC-STEL	Permissible Concentration — Short Term Exposure Limit
PC-TWA	Permissible Concentration — Time Weighted Average
PNEC	Predicted No Effect Concentration
RSEN	Respiratory sensitiser (SWA WEL 2024 notation)
SDS	Safety Data Sheet

Sk	Skin notation — absorption through the skin a significant route
STEL	Short Term Exposure Limit (15 min TWA)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TEEL	Temporary Emergency Exposure Limit
TLV	Threshold Limit Value
TWA	Time Weighted Average (8 hr / 40 hr week)
WEL	Workplace Exposure Limit (Safe Work Australia, April 2024)
WHS	Work Health and Safety

Disclaimer

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