

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Aluminum Sulfate Hydrate ACS Grade
Synonyms: dialuminum trisulfate octadecahydrate, Aluminum Sulfate Hydrate
CAS Number: 7784-31-8
Grade/Purity: ACS Grade
Product Type: Salts
Product Use: Industrial, Manufacturing or Laboratory use
Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574
Information: 512-365-6838 | www.alliancechemical.com
Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger

GHS Pictograms:



Hazard Statements:

H290 (17.2%)	May be corrosive to metals [Warning Corrosive to Metals]
H318 (99.2%)	Causes serious eye damage [Danger Serious eye damage/eye irritation]
H412 (17.2%)	Harmful to aquatic life with long lasting effects [Hazardous to the aquatic environment, long-term hazard]

Precautionary Statements:

P234,	P264+P265, P273, P280, P305+P354+P338, P317, P390, P406, and P501
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3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	WEIGHT %	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Aluminum Sulfate Hydrate	98%	7784-31-8	233-135-0	$Al_2H_{36}O_{30}S_3$	666.43 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.
Inhalation	Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable Media	Dry chemical, CO ₂ , water spray. Use water spray to cool containers.
Unsuitable Media	Do not use a solid water stream as it may scatter and spread fire.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Combustion Products	May include carbon oxides and other toxic fumes. See Section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7. HANDLING AND STORAGE

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

No established occupational exposure limits.

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White crystalline powder, granular texture
Odor	Characteristic
pH	Not Available
Melting Point	86°C (186.8°F)
Boiling Point	187°C (368.6°F)
Flash Point	Not Available
Vapor Pressure	Not Available
Specific Gravity	1.61
Solubility	High water solubility, moderate organic solvent
Molecular Formula	Al ₂ H ₃₆ O ₃₀ S ₃
Molecular Weight	666.43 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong acids, strong bases, reactive metals, water (for some concentrated forms).
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence	Not Available
Bioaccumulation	Not Available
Mobility in Soil	Not Available

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

US DOT	UN3264, CORROSIVE LIQUID ACIDIC INORGANIC NOS, 8, PG III
IMDG	UN3264, CORROSIVE LIQUID ACIDIC INORGANIC NOS, 8, PG III, Tunnel (E)
IATA/ICAO	UN3264, CORROSIVE LIQUID ACIDIC INORGANIC NOS, 8, PG III Passenger: 0.5 L (PI 850); Cargo only: 2.5 L (PI 854)
Marine Pollutant	No

15. REGULATORY INFORMATION

TSCA Inventory	All ingredients are listed on the TSCA Active inventory.
California Prop 65	Refer to California Proposition 65 list for current status.
SARA 311/312	See Section 2 for hazard classifications.
SARA 313	Refer to EPA Toxic Release Inventory for current listing status.

16. OTHER INFORMATION

Revision Date: 03/31/2026

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