SAFETY DATA SHEET

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only.

Not for drug, food or household use.

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Section 1 Chemical Product and Company Information

Scientific (800) 225-3739

Product ALUMINUM SULFATE, 18-HYDRATE

Synonyms Aluminum Sulfate, Octahydrate

Section 2 Hazards Identification

Signal word: DANGER Pictograms: GHS05 Target organs: None known



GHS Classification:

Serious eye damage (Category 1)

GHS Label information: **Hazard statement**: H318: Causes serious eye damage.

Precautionary statement:

P280: Wear protective gloves/protective clothing/eye protection/face protection. 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 CENTER or doctor.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3	Composition / Information on Ingredients					
Chemical Name		CAS #	%	EINECS		
Aluminum sulfate		7784-31-8	100%	233-135-0		
Section 4	First Aid Measures					

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES SERIOUS EYE DAMAGE. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Fire or excessive heat above 760°C (1400°F), may produce hazardous decomposition products of toxic and corrosive gases, Sulfur trioxide and Aluminum oxide. Sulfur trioxide is an oxidizing agent which supports combustion and will react with water to form Sulfuric acid.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling & Storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from high humidity and water.

Section 8	Exposure Controls / Personal Protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
	Aluminum sulfate	Not established	Not established	Not established		

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9 Physical & Chemical Prop	perties	
Appearance: Solid, white granules or powder. Odor: No odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: 86°C (187°F) Boiling point: Decomposes Flash point: Non flammable	Evaporation rate (=1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Not applicable Vapor pressure (mm Hg): Negligible Vapor density (Air = 1): Data not available Relative density (Specific gravity): 1.61 @ 17°F Solubility(ies): 50 g/100 ml H ₂ O @ 0°C	Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: 770°C (1418°F) Viscosity: Data not available. Molecular formula: $Al_2(SO_4)_3$ ·18H ₂ O Molecular weight: 666.45
Section 10 Stability & Reactivity		

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures and heat, high humidity and water.

Incompatible materials: Oxidizing agents and moisture.

Hazardous decomposition products: Sulfur trioxide and aluminum oxide.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 6207 mg/kg

Skin corrosion/irritation: Data not available

Serious eye damage/irritation: Eyes-rabbit - Severe irritant.

Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available

STOT-single exposure: Data not available

STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects:

Inhalation: This material hydrolyzes readily to form some sulfuric acid which acts as a tissue irritant, particularly to the lungs.

Ingestion: May cause irritation of gastrointestinal tract, nausea, vomiting, and purging. Human fatal dose recorded at 30 grams.

Skin: May cause skin irritation, especially under repeated or prolonged contact or when moisture is present.

Eyes: May irritate or burn eyes. Similarly for the aqueous solutions.

Signs and symptoms of exposure: Exercise appropriate procedures to minimize potential hazards.

Additional information: RTECS #: BD1700000

Section 12 Ecological Information

Toxicity to fish: Salmo gairdneri (fish, estuary, fresh water), 0.5 mg/L/24 hours

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea), EC50 = 136 mg/L/15 minutes

Toxicity to algae: No data availa	ble
Persistence and degradability:	No
Mobility in soil: No data availab	le

Persistence and degradability: No data available Bioaccumulative potential: No data available

PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.
Section 14
Transport Information (US DOT / CANADA TDG)

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Hazard class: Not applicable Packing		Packing group	 Not Regulated Not applicable Not applicable 	Reportable Qu	Reportable Quantity: No		Marine pollutant: No	
Section 15 Regulatory Information								
A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.								
Component		TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification	
Aluminum sulfate		Listed	d Not listed	Not listed	Not listed	Not listed	Not listed	
Section 16	Additional Informati	ion						
The information contained	The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent of the information only as a supplement to other information gathered by them and must make independent of the information only as a supplement to other information gathered by them and must make independent of the information only as a supplement to other information gathered by them and must make independent of the information only as a supplement to other information gathered by them and must make independent of the information only as a supplement to other information gathered by them and must make independent of the information only as a supplement of the information gathered by the information only as a supplement of the information gathered by the information only as a supplement of the information gathered by the information only as a supplement of the information gathered by the information only as a supplement of the information gathered by the information only as a supplement of the information gathered by the information gathered by the information only as a supplement of the information gathered by the information only as a supplement of the information gathered by the information gathered by the information only as a supplement of the information gathered by the informat							

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