## **GENERAL STORAGE CODE GREEN**

# Section 1 Chemical Product and Company Information



CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use.

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.

ection 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.

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Section 7 Page E2 of E2 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

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.

#### **Physical & Chemical Properties** Section 9

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<sub>2</sub>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<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>•18H<sub>2</sub>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.

Eves: 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 available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: 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.

# **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.

Reportable Quantity: No

### Transport Information (US DOT / CANADA TDG) Section 14

UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable

2012 ERG Guide # Not applicable

**Exceptions:** Not applicable

### 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	Not listed	Not listed	Not listed	Not listed	Not listed

#### Section 16 **Additional Information**

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 determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook

> Revision Date: September 19, 2014 Supercedes: August 1, 2013

Marine pollutant: No