

## 1. Product Identification

<b>Product name</b>	Solid Aluminum Sulfate, Dry Alum
<b>Product description</b>	Solid Aluminum Sulfate
<b>Other means of identification</b>	Aluminum Trisulfate, Dialuminum Trisulfate, Alum, Alum Salt Water
<b>Recommended use</b>	Flocculant, coagulant, potable and residual water treatment, paper and carton treatment.

<b>Manufacturer</b>	<b>Silicatos y Derivados SA de CV</b>	
	01-55-5227-6820 / 01-55-5227-6830 (08:00 - 17:00 hrs)	
	<b>Planta Tlalnepantla</b>	<b>Planta Guadalajara</b>
	Río Lerma #55, Frac. Ind. San Nicolás	Sombrerete 4597, Frac. Zona Industrial
	Tlalnepantla, México, CP 54030, México	Guadalajara, Jalisco, CP 44940, México

<b>In case of emergency call</b>	México SETIQ 01-800-00-214-00 (24 hrs)
	USA CHEMTREC 1-800-424-9300 (24 hrs)

## 2. Hazards Identification

<b>Hazard Classification</b>	Class 3 Health Hazards
	Category 2 Skin Irritation
	Category 2 Eye Irritation

### Label Elements



### WARNING

H315 Causes skin irritation  
H319 Causes serious eye irritation  
P262 Do not get in eyes, on skin, or on clothing.  
P280 Wear protective gloves / protective clothing / eye protection / face protection  
P303+P361+P353 IF ON SKIN (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338: IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## 3. Composition / Information on Ingredients

Chemical and common name	N° CAS	Wt. %
Water	7732-18-5	~ 01
Aluminum Sulfate	10043-01-3	~ 99

## 4. First Aid Measures

<b>Eye</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Skin</b>	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion** If swallowed, DO NOT induce vomiting. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

## 5. Fire Fighting Measures

**Flammable limits** This material is noncombustible.

**Extinguishing media** This material is compatible with all extinguishing media

**Hazards to fire-fighters** None.

**Fire-fighting equipment** The following protective equipment for fire fighters is recommended when this material is present in the area of a fire: chemical goggles, body-covering protective clothing, chemical resistant gloves, rubber boots, SCBA and insulated protective clothing.

## 6. Accidental Release Measures

**Personal protection** Wear basic PPE and approved dust mask. See section 8.

**Environmental hazards** Avoid discharge to potable water net.

**Small Spill cleanup** Shovel into clean, dry, and labeled containers and cover. Flush area with water. Do not get water inside containers or on spilled material.

**Large Spill cleanup** Prevent solids from mixing with water or entering sewers or waterways. Shovel into clean, dry, labeled containers and cover. If liquid is present, dike with inert material (sand, earth, etc.). Consider in situ neutralization and disposal. Ensure adequate decontamination of tools and equipment following clean up.

**Reportable quantity** If a spill goes off site, notification of state and local authorities is recommended.

## 7. Handling and Storage

**Handling** Dry Alum is an irritating solid. Avoid generating dusts. Do not breathe dusts. Do not ingest. Do not get in eyes, on skin or on clothing. Use proper tools when opening containers. Keep containers closed when not in use. Empty containers may contain hazardous residues. When there is a large-scale use, do not use in areas equipped with sprinkler systems. Post "DO NOT USE WATER" signs. Good housekeeping is important to prevent accumulations of dust. Dry sweeping is not recommended.

**Storage** Keep container tightly closed. Keep container in a cool, dry, well-ventilated area. Store away from incompatible materials such as strong bases. Post warning signs.

**Incompatible products** Alkalis.

## 8. Exposure Control / Personal Protection

**Engineering controls** Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. The most effective measures are the total enclosure of processes and the mechanization of handling procedures to prevent all personal contact. Use a corrosion resistant ventilation system separate from other exhaust ventilation systems.

**Respiratory protection** Use an approved dust mask.

**Skin protection** Wear body-covering protective clothing, gloves and appropriate industrial footwear.

Eye protection

Wear safety glasses.

## 9. Physical and Chemical Properties

Appearance	Solid.
Color	White.
Odor	Insignificant.
pH	Approximately > 2.9
Specific gravity	Not available
Solubility in water	Soluble
Boiling point	Similar to water
Melting point	Not available
Ignition point	Not available
Auto ignition point	Not available
Vapor density	Not available
Evaporation rate	Not available
Vapor pressure	Not available
Volatility	Not available
Flammability (solid, gas)	Not available

## 10. Stability and Reactivity

Stability	This material is stable under all conditions of use and storage.
Conditions to avoid	Incompatible with alkalis.
Materials to avoid	Avoid contact with aluminum, tin, lead, zinc, iron and alloys with these metals.
Decomposition	Sulfur dioxide, sulfur trioxide.

## 11. Toxicological Information

Acute data	Oral DL50, rat: 6,207 mg/kg Dermal DL50, rabbit: 1,930 mg/kg Intraperitoneal DL50, mouse: 2,70 mg/kg Inhalation CL50, rat: 2 - 4 mg Al/
Primary irritation	Direct contact may cause moderate irritation in digestive apparatus.
Sensibility	Not available.
Chronic toxicity	Not available
Human test	Not available

## 12. Ecological Information

Persistence and degradability	Not available
Bioaccumulation	Not available
Mobility	Not available
Eco toxicity	Gambusia affinis, CL50 48 hr: 69 mg/L Salvelinus fontinalis, CL50 96 hr: 3.0 mg/L Daphnia magna, CE50 48 hr: 136 mg/L



### 13. Disposal Considerations

<b>Classification</b>	This material is not considered as hazardous waste without dilution.
<b>Disposal Method</b>	Dilute with plenty water and neutralize with lime. Dispose in accordance with federal, state and local regulations and permits.

### 14. Transport Information

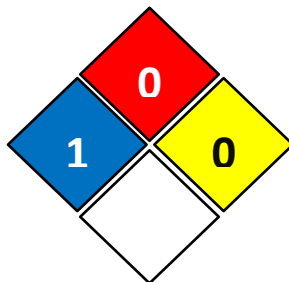
<b>DOT UN Status</b>	This material is not classified as dangerous substance.
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### 15. Regulatory Information

**N° CAS** 10043-01-3

**HMIS / NFPA**

<b>1</b>	Health
<b>0</b>	Flammability
<b>0</b>	Reactivity
	Specific Risk
<b>C</b>	PPE



### 16. Other Information

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**Revision of** 30/12/2014

THE INFORMATION ON THIS SAFETY DATA SHEET IS BELIEVED TO BE ACCURATE AND IT IS THE BEST INFORMATION AVAILABLE TO SILICATOS Y DERIVADOS THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONS FOR HANDLING A CHEMICAL BY A PERSON TRAINED IN CHEMICAL HANDLING. SILICATOS Y DERIVADOS MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED WITH RESPECT TO SUCH INFORMATION OR THE PRODUCT TO WHICH IT RELATES, AND WE ASSUME NO LIABILITY RESULTING FROM THE USE OR HANDLING OF THE PRODUCT TO WHICH THIS SAFETY DATA SHEET RELATES. USERS AND HANDLERS OF THIS PRODUCT SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION PROVIDED HEREIN FOR THEIR OWN PURPOSES.