

Safety Data Sheet

1. IDENTIFICATION

Aluminum Sulfate Powder

Use: Water Treatment Chemical
Company: Chemical Research Products Industrial Sales Incorporated

475 J.P Rizal St., Mahabang Parang, Sta. Maria, Bulacan 3022
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Emergency Information

Chemical Research Technical Tel. No.: (02) 687-6541

2. HAZARD(s) IDENTIFICATION

GHS Classification: Skin irritation (category 2), H315

Serious eye damage/ irritation (category 2), H319

Corrosive to metals (category 1), H290

Label Element:



Signal Word: Warning

Hazard Statement: Causes skin irritation
Causes serious eye irritation
Maybe corrosive to metals

Precautionary Statements

- Prevention:** Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves, clothing, eye protection and face protection.
- Response:** Keep only in original container.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs, Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Absorb spillage to prevent material damage.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable breathing.
- Storage:** Store in corrosive resistant container with a resistant inner liner.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Percentage
Aluminum Sulfate	(1327-41-9)	16% - 17%
Water	(7732-18-5)	Balance

4. FIRST-AID MEASURES

- Eyes:** Immediately flush eyes gently with warm water at least 15 minutes. Washing with in one minute is essential to achieve maximum effectiveness. Seek immediate medical attention.
- Skin:** Promptly wash with mild soap and water at least 15 minutes. Remove contaminated clothing and shoes. If skin irritation occurs; Get medical advice/attention.
- Swallowing:** Do NOT induce vomiting. Rinse mouth with water. Drink 1 or 2 glasses of water or milk. If symptoms persist, call a physician. Never give anything by mouth to an unconscious person. Get medical attention.
- Inhalation:** Remove patient to fresh air. Keep patient warm and at rest. Apply oxygen or artificial respiration if need. Call a physician.

5. FIRE-FIGHTING MEASURES

- Extinguishing Media:** Water spray, dry chemical, CO₂ or class B extinguishing agent.
- Special Hazard:** May produce hazardous fumes or hazardous decomposition products.
- Protective Equipment:** Wear full protective clothing and self-contained breathing apparatus exposed to vapors or products of combustion.

Advice for Firefighters: Product is a water solution and nonflammable. In a fire, this product may build up pressure and rupture a sealed container; cool exposed containers with water spray. Avoid breathing mists or spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precaution: Avoid contact with skin, eyes and clothing. Wear adequate personal protective clothing and equipment. Approved breathing apparatus may be necessary.

Environmental Precaution: Cover the drains to prevent the product from entering the environment. If product contaminates rivers and lakes or drains inform respective authorities.

Clean up Methods: Absorb with clay, sawdust on other absorbent material

Additional Information: Product is water-soluble and compatible with water treatment plants.

7. HANDLING and STORAGE

Handling: Use good personal hygiene practice. Wash after handling; Wear chemical splash goggles, gloves, and protective clothing when handling; Avoid breathing vapors or mists.

Storage: Store in closed containers in a dry, ventilated area. Do not store near extreme heat, open flame, source of ignition. Do not store in unlined metal containers. Product may slowly corrode iron, brass, copper, aluminum, mild steel, and stainless steel.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Personal Protection: Avoid contact, wear gloves, safety boots, safety glasses and overalls

Respiratory Protection: NIOSH/MSHA approved respiratory protection equipment is recommended.

Eye Protection: Chemical splash goggles and face shield

Skin Protection: Wear resistance gloves and impervious clothing and boots.

Other Personal Protection

Data: Eyewash fountains and safety showers must be easily accessible.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance: White powder
Odor: Weak
pH : 2.0 – 4.0 (5% solution)

Specific Gravity:	No data available
Vapor Pressure:	Not established
Boiling Point:	Not established
Freezing Point:	Not established
Evaporation Rate:	Not established
Solubility in Water:	Completely miscible
Viscosity:	Not established
Relative Density:	Not established

10. STABILITY and REACTIVITY

Conditions to Avoid:	Excessive heating after water evaporation for long period of time.
Materials to Avoid:	Can be very corrosive to most metals including cast iron, steel, and aluminum. The corrosivity of Sulphuric Acid and aluminum sulphate depends on factors such as concentration and acid impurities.
Hazardous Decomposition Products:	Thermal decomposition sulfur dioxide, sulfur trioxide and sulfuric acid vapors.

11. TOXICOLOGICAL INFORMATION

Toxicological Data:	Specific toxicity tests have not been conducted on this product.
Aluminum Sulphate:	LD50 – greater than 9000mg/kg
Sulfuric Acid:	LD50 = 2140 mg/kg LC50 = 510 mg/m ³ for 2 hrs Skin Effect: Severe irritation Eye effect: Severe irritation
Reproductive Effects:	No data available
Teratogenicity and Fetotoxicity:	No data available
Synergistic Material:	None known

12. ECOLOGICAL INFORMATION

Ecotoxicological Information – Aluminum Sulphate LC50 (12-96) goldfish: 100 mg/L
Persistence and Degradation: No data available

13. DISPOSAL CONSIDERATION

- Disposal of wastes:** DO NOT mix with other chemical wastes. Do not put solutions containing this product into sewer systems. Dispose of product in an approved chemical waste landfill or incinerate in accordance with applicable Federal, state and local regulation. Do not re-use empty containers.
- Contaminated Packaging:** Since empty containers retain product residue, follow label warnings even after container is emptied.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

Land Transport (ADR / RID)
Class 4
UN Number: 3264

Sea Transport (IMDG)
Class 4
UN Number: 3264
Marine Pollutant: None

Air Transport (IATA)
Class 4
UN Number: 3264

15. REGULATORY INFORMATION

Chemical Weapons Convention: No
TSCA 12(b): No
CDTA: No
SARA 311/312: Acute: Yes
Chronic: No
Fire: No
Pressure: No
Reactivity: No (Mixture / Solid)

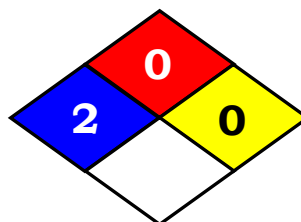
WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

HMIS

HEALTH	2
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	X

NFPA



General Information

Notes on storage conditions and product stability:

Aluminum Sulfate Powder are stable indefinitely when stored under benign conditions (sealed vessel, constant temperature). However, some users may experience product instability, which can arise from two potential problems:

The product is designed to break down on contact with water, to allow water treatment to occur. As a result, water vapor condensing on inside tank surfaces may lead to colorless crystals forming when the water drops back into the bulk liquid. These crystals can only be dissolved using hot water.

Condensation should thus be minimized by tank design and location. If possible, avoid tanks that are dark in color, in direct sunlight, and off the ground, as these factors will lead to large day/night temperature fluctuations.