

# Material Safety Data Sheet

## Aluminum potassium sulfate dodecahydrate

ACC# 19200

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Aluminum potassium sulfate dodecahydrate

**Catalog Numbers:** AC217480000, AC217480010, AC217485000, AC423260000, AC423260010, AC423260030, AC423260050, AC423265000, A601-3, A601-500, A605-12, A605-212, A605-500

**Synonyms:** Alum; Aluminum potassium sulfate, dodecahydrate; Kalinite; Potassium alum; Sulfuric acid, aluminum potassium salt.

**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7784-24-9	Aluminum potassium sulfate dodecahydrate	100	unlisted

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: white crystals.

**Warning!** Irritant. Harmful if swallowed. Causes eye and skin irritation. May cause respiratory tract irritation.

**Target Organs:** Eyes, skin.

#### Potential Health Effects

**Eye:** Causes eye irritation. May cause chemical conjunctivitis.

**Skin:** Causes skin irritation. May be harmful if absorbed through the skin.  
**Ingestion:** Harmful if swallowed. Ingestion of large amounts may cause gastrointestinal irritation.  
**Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled.  
**Chronic:** No information found.

## Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.  
**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.  
**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.  
**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.  
**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.  
**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.  
**Flash Point:** Not applicable.  
**Autoignition Temperature:** Not applicable.  
**Explosion Limits, Lower:** Not available.  
**Upper:** Not available.  
**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.  
**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Wash clothing before reuse. Discard contaminated shoes.

**Storage:** Store in a cool, dry place. Keep containers tightly closed.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Aluminum potassium sulfate dodecahydrate	none listed	2 mg/m <sup>3</sup> TWA (as Al) (listed under Aluminum, soluble salts).	none listed
Potassium aluminum sulfate	none listed	2 mg/m <sup>3</sup> TWA (as Al) (listed under Aluminum, soluble salts).	none listed

**OSHA Vacated PELs:** Aluminum potassium sulfate dodecahydrate: No OSHA Vacated PELs are listed for this chemical. Potassium aluminum sulfate: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystals

**Appearance:** white  
**Odor:** odorless  
**pH:** 3.0-3.5 (10% aq soln)  
**Vapor Pressure:** Not applicable.  
**Vapor Density:** Not available.  
**Evaporation Rate:**Not applicable.  
**Viscosity:** Not applicable.  
**Boiling Point:** Not available.  
**Freezing/Melting Point:**92 deg C  
**Decomposition Temperature:**200 deg C  
**Solubility:** Partially soluble.  
**Specific Gravity/Density:**1.757  
**Molecular Formula:**AlK(SO4)2.12H2O  
**Molecular Weight:**474.3558

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Incompatible materials, dust generation.  
**Incompatibilities with Other Materials:** Aluminum, copper, steel, zinc, strong oxidizing agents.  
**Hazardous Decomposition Products:** Oxides of sulfur, aluminum oxide, oxides of potassium.  
**Hazardous Polymerization:** Has not been reported

## Section 11 - Toxicological Information

**RTECS#:**  
**CAS#** 7784-24-9: WS5690000  
**CAS#** 10043-67-1: WS5650000  
**LD50/LC50:**  
Not available.  
Not available.

**Carcinogenicity:**  
CAS# 7784-24-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.  
CAS# 10043-67-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No information found  
**Teratogenicity:** No information found  
**Reproductive Effects:** No information found  
**Mutagenicity:** No information found  
**Neurotoxicity:** No information found  
**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	Not regulated as a hazardous material	Not Regulated
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7784-24-9 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

CAS# 10043-67-1 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

**CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

**SARA Codes**

CAS # 7784-24-9: delayed.

**Section 313** No chemicals are reportable under Section 313.

**Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 7784-24-9 can be found on the following state right to know lists: California, (listed as Aluminum, soluble salts), Pennsylvania, (listed as Aluminum, soluble salts), Minnesota, (listed as Aluminum, soluble salts).

CAS# 10043-67-1 can be found on the following state right to know lists: California, (listed as Aluminum, soluble salts), Pennsylvania, (listed as Aluminum, soluble salts), Minnesota, (listed as Aluminum, soluble salts).

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations****European Labeling in Accordance with EC Directives****Hazard Symbols:**

XN

**Risk Phrases:**

R 22 Harmful if swallowed.

R 36/38 Irritating to eyes and skin.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

**WGK (Water Danger/Protection)**

CAS# 7784-24-9: No information available.

CAS# 10043-67-1: 1

**Canada - DSL/NDSL**

CAS# 10043-67-1 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 7784-24-9 (listed as Aluminum, soluble salts) is listed on the Canadian Ingredient Disclosure List.

CAS# 10043-67-1 (listed as Aluminum, soluble salts) is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

**MSDS Creation Date:** 5/08/1998

**Revision #7 Date:** 11/20/2008

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*