

# Mallinckrodt

## Material Safety Data

Emergency Phone Number: 314-539-1600

### ALUMINUM POTASSIUM SULFATE

#### PRODUCT IDENTIFICATION:

Synonyms: Sulfuric acid, aluminum potassium salt (2:1:1), dodecahydrate; potassium alum dodecahydrate; Alum Potassium USP Powder TAC

Formula CAS No.: 7784-24-9 (Hydrated)

TSCA CAS No.: 10043-67-1 (Anhydrous)

Molecular Weight: 474.38

Chemical Formula:  $AlK(SO_4)_2 \cdot 12H_2O$

Hazardous Ingredients: Aluminum potassium sulfate

#### PRECAUTIONARY MEASURES

**WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION.**

Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

Avoid contact with eyes.

#### EMERGENCY/FIRST AID

If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. In all cases call a physician. SEE SECTION 5.

DOT Hazard Class: Not Regulated

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Performance and Laboratory Chemical Div., P.O. Box 800, Paris, KY 40362.

JUL 21 1993

#### SECTION 1 Physical Data

Appearance: Colorless crystals.

Odor: Odorless.

Solubility: 14 g in 100 g of water.

Boiling Point: Loses water at about 200°C

(392°F).

Melting Point: 92.5°C

Specific Gravity: 1.73

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate: No information found.

#### SECTION 2 Fire and Explosion Information

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### SECTION 3 Reactivity Data

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Toxic oxides of sulfur at elevated temperatures.

**Hazardous Polymerization:**

This substance does not polymerize.

**Incompatibilities:**

Alkalies. Corrosive to aluminum, steel, copper, zinc, and other metals.

#### SECTION 4 Leak/Spill Disposal Information

Spills: Sweep up or vacuum spilled material and place in a suitable container for disposal. Neutralize the residue with soda ash. The area may then be flushed with plenty of water. Adequate ventilation is required. Disposal: Large quantities may be sent to an approved waste facility or recovered. Smaller amounts may be dissolved in water, treated with soda ash to neutralize and sent to the sewer with ample water. Ensure compliance with local, state and federal regulations.

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## SECTION 5 Health Hazard Information

### A. EXPOSURE /HEALTH EFFECTS

#### Inhalation:

Dust may act as an irritant to the respiratory system, mainly due to the formation of acid sulfur compounds via hydrolysis. Coughing, sneezing, sore throat or breathing difficulty may be noted.

#### Ingestion:

May cause abdominal pain, stricture, gastro-intestinal upset due principally to acid formed by hydrolysis. Large amounts have caused gastrointestinal inflammation.

#### Skin Contact:

Mild irritant and astringent. May cause soreness or redness due to acids formed by hydrolysis.

#### Eye Contact:

Irritant, crystals may be abrasive.

#### Chronic Exposure:

Not expected to be a health hazard.

#### Aggravation of Pre-existing Conditions:

No adverse effects expected.

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### B. FIRST AID

#### Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

#### Ingestion:

If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Call a physician immediately. Never give anything by mouth to an unconscious person.

#### Skin Exposure:

Wash exposed area with soap and water. Get medical advice if irritation develops.

#### Eye Exposure:

Wash eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

### C. TOXICITY DATA

(RTECS, 1986)

No LD50/LC50 information found relating to normal routes of occupational exposure. Reproductive effects data cited.

### SECTION 6 Occupational Control Measures

#### Airborne Exposure Limits:

-OSHA Permissible Exposure Limit (PEL):  
2 mg/m<sup>3</sup> (TWA) soluble salts as Al  
-ACGIH Threshold Limit Value (TLV):  
2 mg/m<sup>3</sup> (TWA) soluble salts as Al

### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

### Personal Respirators: (NIOSH Approved)

If the TLV is exceeded, a dust/mist respirator with chemical goggles may be worn, in general, up to ten times the TLV. Consult respirator supplier for limitations. Alternatively, a supplied air full facepiece respirator or airtight hood may be worn.

### Skin Protection:

Wear protective gloves and clean body-covering clothing.

### Eye Protection:

Use chemical safety goggles. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

### SECTION 7 Storage and Special Information

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.

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ALPOS

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## Addendum to Material Safety Data Sheet

### REGULATORY STATUS

(Chem Key: ALPOS)

Hazard Categories for SARA  
Section 311/312 Reporting  
Acute Chronic Fire Pressure Reactive

X

Product or Components of Product:	SARA EHS Sect. 302 RQ (lbs.)	TPQ (lbs.)	SARA Section 313 Chemicals Name List	Chemical Category	CERCLA Sec.103 RQ (lbs.)	RCRA Sec. 261.33
ALUMINUM POTASSIUM SULFATE (10043-67-1)	No	No	No	No	No	No

SARA Section 302 EHS RQ: Reportable Quantity of Extremely Hazardous Substance, listed at 40 CFR 355.

SARA Section 302 EHS TPQ: Threshold Planning Quantity of Extremely Hazardous Substance. An asterisk (\*) following a Threshold Planning Quantity signifies that if the material is a solid and has a particle size equal to or larger than 100 micrometers, the Threshold Planning Quantity = 10,000 LBS.

SARA Section 313 Chemicals: Toxic Substances subject to annual release reporting requirements listed at 40 CFR 372.65.

CERCLA Sec. 103: Comprehensive Environmental Response, Compensation and Liability Act (Superfund). Releases to air, land or water of these hazardous substances which exceed the Reportable Quantity (RQ) must be reported to the National Response Center. (800-424-8802); Listed at 40 CFR 302.4

RCRA: Resource Conservation and Recovery Act. Commercial chemical product wastes designated as acute hazards and toxic under 40 CFR 261.33

Effective Date: 01-11-90 Supersedes 04-06-89

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