

**** MATERIAL SAFETY DATA SHEET ****

Aluminum Potassium Sulfate Dodecahydrate
19200

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Aluminum Potassium Sulfate Dodecahydrate
Catalog Numbers:
S70456, S70459, S70459-1, A601 3, A601 500, A601-3, A601-500, A6013,
A601500, A605, A605-12, A605-212, A605-500, A605212, A605500, S704591
Synonyms:
Alum; Aluminum potassium sulfate, dodecahydrate; Kalinite; Potassium
alum; Sulfuric acid, aluminum potassium salt.
Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, 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	%	EINECS#
7784-24-9	Aluminum Potassium Sulfate Dodecahydrate	100	unlisted

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: white.
Caution! May cause respiratory and digestive tract irritation.
Contact with skin causes irritation and possible burns, especially if
the skin is wet or moist. May cause severe eye irritation and
possible injury.
Target Organs: None.

Potential Health Effects

Eye:
Causes eye irritation.
Skin:
Contact with skin causes irritation and possible burns, especially
if the skin is wet or moist.
Ingestion:
Ingestion of large amounts may cause gastrointestinal irritation.
Inhalation:
Dust is irritating to the respiratory tract.
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 soap and water for at
least 15 minutes while removing contaminated clothing and shoes. Wash
clothing before reuse.
Ingestion:
If victim is conscious and alert, give 2-4 cupfuls of milk or water.
Never give anything by mouth to an unconscious person. Get medical
aid if irritation or symptoms occur.
Inhalation:
Remove from exposure to fresh air immediately. If not breathing,
give artificial respiration. If breathing is difficult, give oxygen.
Get medical aid if cough or other symptoms appear.
Notes to Physician:
Treat symptomatically and

**** 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. Vapors may
be heavier than air. They can spread along the ground and collect
in low or confined areas.
Extinguishing Media:
In case of fire, use water, dry chemical, chemical foam, or
alcohol-resistant foam. Use agent most appropriate to extinguish
fire.

**** 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. Wash clothing
before reuse. Discard contaminated shoes.
Storage:
Store in a cool, dry place. Keep containers tightly closed. Keep
away from strong bases.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Aluminum Potassium Sulfate Dodecahydrate	metal dust, as Al: 10 mg/m ³ TWA (listed under ** no name **).	total: 10 mg/m ³ TWA; respirable dust: 5 mg/m ³ TWA; pyro powders and welding fume s: 5 mg/m ³ TWA; soluble salts and alkalis: 2 mg/m ³ TWA (listed under ** no name **).	total dust, as Al: 15 mg/m ³ TWA; respirable fraction, as Al: 5 mg/m ³ TWA (listed under ** no name **).

OSHA Vacated PELs:
Aluminum Potassium Sulfate Dodecahydrate:
total dust, as Al: 15 mg/m³ TWA; respirable fraction, as Al: 5 mg/m³
TWA (listed under ** no name **)

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 a respirator's use.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Solid
Appearance: white
Odor: odorless
pH: 3.3 (0.2M solution)
Vapor Pressure: Not applicable.
Vapor Density: 16.4
Evaporation Rate: Not applicable.
Viscosity: Not applicable.
Boiling Point: Not available.
Freezing/Melting Point: 92.5 deg C
Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
NFPA Rating: (est.) Health: 1; Flammability: 0; Reactivity: 0
Explosion Limits, Lower: Not available.
Upper: Not available.
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 ****

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Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Incompatible materials, excess heat.
Incompatibilities with Other Materials:
Strong oxidizing agents, steel, aluminum, copper, zinc.
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
LD50/LC50:
Not available.
Carcinogenicity:
Aluminum Potassium Sulfate Dodecahydrate -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

**** 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 Part 261. 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
No information available.
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA.
CAS# 7784-24-9 is not listed on the TSCA inventory.
It is for research and development use only.
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.
SARA
Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 7784-24-9: chronic.
Section 313
This material contains Aluminum Potassium Sulfate Dodecahydrate (listed as ** undefined **), 100%, (CAS# 7784-24-9) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depleters.
This material does not contain any Class 2 Ozone depleters.
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

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under the CWA.

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

STATE

Aluminum Potassium Sulfate Dodecahydrate can be found on the following state right to know lists: California, (listed as ** no name **), New Jersey, (listed as ** no name **), Florida, (listed as ** no name **), Pennsylvania, (listed as ** no name **), Minnesota, (listed as ** no name **), Massachusetts, (listed as ** no name **).
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: Not available.
Risk Phrases:
Safety Phrases:

WGK (Water Danger/Protection)

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

United Kingdom Occupational Exposure Limits

CAS# 7784-24-9: OES-United Kingdom, TWA (listed as ** undefined **): total inhalable dust 10 mg/m3 TWA; respirable dust 4 mg/m3 TWA

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.
This product has a WHMIS classification of D2B.
CAS# 7784-24-9 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 7784-24-9: OEL-AUSTRALIA:TWA 2 mg(Al)/m3
OEL-BELGIUM:TWA 2 mg(Al)/m3
OEL-DENMARK:TWA 2 mg(Al)/m3
OEL-FRANCE:TWA 2 mg(Al)/m3
OEL-THE NETHERLANDS:TWA 2 mg(Al)/m3
OEL-RUSSIA:TWA 2 mg(Al)/m3
OEL-SWEDEN:TWA 2 mg(Al)/m3
OEL-SWITZERLAND:TWA 2 mg(Al)/m3
OEL-UNITED KINGDOM:TWA 2 mg(Al)/m3
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 5/08/1998 Revision #1 Date: 8/02/2000

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 way shall the company 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 the company has been advised of the possibility of such damages.