



Material Safety Data Sheet

Aluminum sulfate

MSDS# 00980

Section 1 - Chemical Product and Company Identification

MSDS Name: Aluminum sulfate
Catalog Numbers: AC192430000, AC192430050
Synonyms: Aluminum trisulfate; Dialuminum sulphate; Sulfuric acid aluminum salt
Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#: 10043-01-3
Chemical Name: Aluminum sulfate
%: 99
EINECS#: 233-135-0

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! Hygroscopic (absorbs moisture from the air). This is expected to be a low hazard for usual industrial handling.
May cause eye, skin, and respiratory tract irritation. Target Organs: None.

Potential Health Effects

Eye: Dust may cause mechanical irritation.
Skin: May cause skin irritation. Low hazard for usual industrial handling.
Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. Expected to be a low ingestion hazard.
Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.
Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. 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 immediately.
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 if cough or other symptoms appear.

Notes to Physician:

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.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not available.

Flash Point: Not available

Explosion Limits: Not available
Lower:

Explosion Limits: Not available
Upper:

NFPA Rating: health: 1; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Aluminum sulfate	none listed	2 mg/m ³ TWA (as Al) (listed under Aluminum, soluble salts).	none listed

OSHA Vacated PELs: Aluminum sulfate: 2 mg/m³ TWA (as Al, listed under Aluminum) (listed under Aluminum, soluble salts)

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

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: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: white

Odor: none reported

pH: >2.9 at 5% solution.

Vapor Pressure: Negligible.

Vapor Density: Not available

Evaporation Rate: Negligible.

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: 770 deg C (1,418.00°F)

Decomposition Temperature:

Solubility in water: Soluble

Specific Gravity/Density: 2.7 (water=1)

Molecular Formula: Al₂(SO₄)₃

Molecular Weight: 342.1358

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures. Hygroscopic: absorbs moisture or water from the air.

Conditions to Avoid:

Dust generation, exposure to moist air or water.

Incompatibilities with Other Materials

No significant incompatibilities identified with common materials and contaminants..

Hazardous Decomposition Products

Oxides of sulfur, aluminum oxide.

Hazardous Polymerization

Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 10043-01-3: BD1700000

RTECS:

LD50/LC50: CAS# 10043-01-3: Draize test, rabbit, eye: 10 mg/24H Severe;
Oral, mouse: LD50 = 6207 mg/kg;

Carcinogenicity: Aluminum sulfate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:

Packing Group:

USA RQ: CAS# 10043-01-3: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 10043-01-3: 1

Canada

CAS# 10043-01-3 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

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.

CAS# 10043-01-3 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 10043-01-3 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 5/03/1999

Revision #7 Date 7/20/2009

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 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.
