



**Fisher
Scientific**

**ACRÖS
ORGANICS**

MSDS

**IMPORTANT SAFETY INFORMATION -- DO NOT DISCARD.
PLEASE ROUTE TO COMPANY SAFETY OFFICER.**

SYRACUSE CITY
SCHOOL DISTRICT
BOVA SUPPLY CENTER
1023 ERIE BLVD W

SYRACUSE NY 13204

2,340

**IF NAME AND/OR ADDRESS HAVE CHANGED, CONTACT YOUR
SALES REPRESENTATIVE OR LOCAL BRANCH.**

FOR EACH CHEMICAL, A MSDS SHEET WILL BE SENT ONLY ON THE
FIRST SHIPMENT UNLESS A SUBSTANTIAL REVISION OCCURS.

REQUIRED MATERIAL SAFETY DATA SHEETS (MSDS) NOT INCLUDED IN
THIS MAILING WILL FOLLOW UNDER SEPARATE COVER.

THIS PACKET MAY CONTAIN MSDS FOR PRODUCTS MANUFACTURED BY
OTHERS AND DISTRIBUTED BY FISHER SCIENTIFIC COMPANY OR ACROS
ORGANICS. THESE MSDS WERE PREPARED BY THE MANUFACTURER
AND FISHER/ACROS DISCLAIMS ALL LIABILITY FOR THE CONTENT.

**NEW!!! FISHER SCIENTIFIC AND ACROS ORGANICS MSDS ARE NOW
AVAILABLE ELECTRONICALLY THROUGH CHEMEXPRESS®.
CHEMEXPRESS IS OBTAINABLE ON CD OR DISKETTES; WINDOWS OR
MACINTOSH; SINGLE USER OR NETWORK. FOR PRICING AND
ORDERING INFORMATION, PLEASE CALL 1-800-766-7000.**

FISHER SCIENTIFIC HAS A COMPLETE LINE OF SAFETY PRODUCTS AND INFORMATION FOR THE LABORATORY.
CONTACT YOUR LOCAL FISHER BRANCH FOR FILMS, BROCHURES, CATALOGS AND PRODUCTS.
THE NEW ACROS ORGANICS CATALOG OFFERS ONE OF THE BROADEST LINES OF ORGANIC CHEMICALS
IN THE WORLD. CONTACT YOUR LOCAL FISHER BRANCH TO PLACE AN ORDER, TO RECEIVE A CATALOG
OR TO RECEIVE A FREE SUBSCRIPTION TO THE ACROS ORGANICS ACTA.

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

Aluminum Sulfate
 00980

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

MSDS Name: Aluminum Sulfate
 Catalog Numbers: 0492, S70495
 Synonyms:
 Company Identification: Fisher Scientific
 1 Reagent Lane
 Fairlawn, NJ 07410
 For information, call: 201-796-7100
 Emergency Number: 201-796-7100
 For CHEMREC assistance, call: 800-424-9300
 For International CHEMREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	BINCS#
10043-01-3	Aluminum sulfate	100.0	233-135-0

Hazard Symbols: None Listed.
 Risk Phrases: None Listed.

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

EMERGENCY OVERVIEW

Appearance: white powder solid.
 Caution: Hygroscopic (absorbs moisture from the air). This is a low hazard for usual industrial handling. May cause respiratory and dermative tract irritation. May cause eye and skin 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 cupsful of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.
 Inhalation: Remove victim from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing difficult, give oxygen. Get medical aid if cough or other symptoms appear.
 Notes to Physician: Treat symptomatically and antidote: None reported.

**** 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: dry chemical, carbon dioxide, or appropriate foam.
 Autoxidation: Not applicable.
 Flash Point: Temperature Not available.
 Explosion Limits: Lower: Not available.
 Explosion Limits, upper: Not available.

NFPA Rating: (estimated) 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 ****

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

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Aluminum sulfate	2 mg/m3 TWA (as Al) (listed under ** no name **)	2 mg/m3 TWA (as Al) (listed under ** no name **)	none listed

OSHA Vacated PELs:

Aluminum sulfate:
 2 mg/m3 TWA (as Al). Listed under 'Aluminum' (listed under ** no name **)

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face Standard regulations in 29 CFR 1910.133 or European Standard EN186.
 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 as approved by a NIOSH or European Standard EN 149 approved respirator when necessary.

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

Physical State: Solid powder
 Color: white
 Odor: none reported
 pH: >2.9 at 5% solution.
 Vapor Pressure: Negligible.
 Vapor Density: Not available.
 Evaporation Rate: Not available.
 Boiling Point: Not available.
 Freezing/Melting Point: 1418 deg F
 Decomposition Temperature: 1418 deg F
 Solubility in water: Soluble.
 Specific Gravity/Density: 2.7 (water=1)
 Molecular Formula: Al2(SO4)3
 Molecular Weight: 342.1558

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability: Stable under normal temperatures and pressures.
 Conditions to Avoid: Incompatible materials, dust generation, moisture, exposure to moist air or water.
 Incompatible Materials with Other Materials: Moisture.

Hazardous Decomposition Products:
None of the chemicals in this product are listed.
Hazardous Polymerization: Has not been reported.

*** SECTION 11 - TOXICOLOGICAL INFORMATION ***

RTECS#:
CAS# 10043-01-3: BDI700000
LD50:
CAS# 10043-01-3: Draize test, rabbit, eye: 10 mg/24H Severe; Oral,
mouse; LD50 = 6207 mg/kg.
Carcinogenicity:
Aluminum sulfide -
Aluminum sulfate -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No data available.
Teratology:
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 ***

Ecotoxicity:
Fish: Goldfish: LC50 = 100 mg/L; 12-96 Hr.: Unspecified

*** SECTION 13 - DISPOSAL CONSIDERATIONS ***

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Determination is listed in 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
No information available
Canadian TDG
No information available.

*** SECTION 15 - REGULATORY INFORMATION ***

US FEDERAL
TSCA
CAS# 10043-01-3 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
SARA
None of the chemicals in this material have a SNUR under TSCA.
SARA
None of the chemicals in this material have a SNUR under TSCA.
GHS
None of the chemicals in this material have a SNUR under TSCA.
CAS# 10043-01-3: 2009 final RQ
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPE.
SARA Codes
CAS # 10043-01-3: acute, chronic.
Section 313
None of the chemicals are reportable under Section 313.

Clean Air Act

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
Aluminum sulfate can be found on the following state right to know lists: California New Jersey Pennsylvania Minnesota, (listed as ** no name **), Massachusetts.

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:
None of the chemicals in this product are listed.

*** SECTION 16 - ADDITIONAL INFORMATION ***

WGK (Water Pollution Class): 1
CAS# 10043-01-3: 1
United Kingdom Occupational Exposure Limits
CAS# 10043-01-3: OES-United Kingdom, TWA (listed as ** undefined **): 2 mg/m3 TWA
United Kingdom Maximum Exposure Limits
Canada

Exposure Limits

CAS# 10043-01-3 is listed on Canada's DSL List.
This product has a WHMIS classification of D2.
CAS# 10043-01-3 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits
CAS# 10043-01-3: OEL-AUSTRALIA:TWA 2 mg(AI)/m3
OEL-BELGIUM:TWA 2 mg(AI)/m3
OEL-CANADA:TWA 2 mg(AI)/m3
OEL-FRANCE:TWA 2 mg(AI)/m3
OEL-THE NETHERLANDS:TWA 2 mg(AI)/m3
OEL-RUSSIA:TWA 2 mg(AI)/m3
OEL-SWEDEN:TWA 2 mg(AI)/m3
OEL-SWITZERLAND:TWA 2 mg(AI)/m3
OEL-UNITED KINGDOM:TWA 2 mg(AI)/m3
OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

MSDS Creation Date: 5/03/1999 Revision #2 Date: 3/18/2003

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