

Material Safety Data Sheet

Creation Date 05-Oct-2010

Revision Date 05-Oct-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

Synonyms

Cat No.

Recommended Use

Company

Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Aluminium nitrate nonahydrate

AC218280000; AC218280050; AC218281000; AC218285000

Nitric acid, aluminum salt, nonahydrate.; Aluminum trinitrate nonahydrate

Laboratory chemicals

Entity / Business Name

Acros Organics One Reagent Lane Fair Lawn, NJ 07410 **Emergency Telephone Number**

For information in the US, call: 800-ACROS-01 For information in Europe, call: +32 14 57 52

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Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-

9300

CHEMTREC Phone Number, Europe: 703-

527-3887

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Oxidizer: Contact with combustible/organic material may cause fire. Irritating to eyes, respiratory system and skin. Hygroscopic.

Appearance Clear Physical State Solid odor odorless

Target Organs

Skin, Respiratory system, Eyes

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes Irritating to eyes.

Skin Irritating to skin. May be harmful in contact with skin. **Inhalation** Irritating to respiratory system. May be harmful if inhaled.

Ingestion May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting

and diarrhea.

Chronic Effects

None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Aluminium nitrate nonahydrate	7784-27-2	100
Aluminum nitrate	13473-90-0	0

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion Do not induce vomiting. Obtain medical attention.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point No information available.

Method No information available.

Autoignition Temperature No information available.

Explosion Limits

UpperNo data availableLowerNo data available

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

Unsuitable Extinguishing Media No information available.

Hazardous Combustion Products No information available.

Sensitivity to mechanical impactNo information available.Sensitivity to static dischargeNo information available.

Specific Hazards Arising from the Chemical

May ignite combustibles (wood paper, oil, clothing, etc.).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA Health 2 Flammability 1 Physical hazards OX Instability 2

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental Precautions Should not be released into the environment.

Uр

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep away from clothing and other combustible materials. Avoid dust formation.

7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do

not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest. Keep away from

clothing and other combustible materials.

Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near Storage

combustible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ensure that evewash stations and safety showers are close to the workstation location. Ensure **Engineering Measures**

adequate ventilation, especially in confined areas.

This product does not contain any hazardous materials with occupational exposure limits **Exposure Guidelines**

established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection

Skin and body protection **Respiratory Protection**

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.

Wear appropriate protective gloves and clothing to prevent skin exposure.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Solid **Physical State Appearance** Clear odorless odor

Odor Threshold No information available. pН 2.5-3.5 5% aq.sol. No information available. **Vapor Pressure**

No information available. **Vapor Density** Viscosity No information available. **Boiling Point/Range** No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

73°C / 163.4°F **Melting Point/Range** 135 °C

Decomposition temperature

Flash Point No information available. **Evaporation Rate** No information available. **Specific Gravity** No information available. Solubility No information available. log Pow No data available

Molecular Weight 375.13

Molecular Formula AI N3 O9 . 9 H2 O

10. STABILITY AND REACTIVITY

Stability Oxidizer: Contact with combustible/organic material may cause fire.

Hygroscopic.

Conditions to Avoid Incompatible products. Excess heat. Combustible material. Avoid

dust formation. Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Bases, Combustible material, Reducing

agents, Acids, Heavy metals, Cyanides, Powdered metals

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides

(NOx)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions. None under normal processing..

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aluminium nitrate nonahydrate	3671 mg/kg (Rat)	Not listed	Not listed
Aluminum nitrate	204 mg/kg (Rat)	Not listed	Not listed

Irritation Irritating to eyes, respiratory system and skin

Toxicologically Synergistic

Products

No information available.

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product

Sensitization No information available.

Mutagenic Effects No information available.

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

Other Adverse Effects The toxicological properties have not been fully investigated.. See actual entry in RTECS for

complete information.

Endocrine Disruptor Information No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available

Mobility No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national

hazardous waste regulations to ensure complete and accurate classification

14. TRANSPORT INFORMATION

DOT

UN-No UN1438

Proper Shipping Name ALUMINUM NITRATE

Hazard Class 5.1 Packing Group

TDG

UN-No UN1438

Proper Shipping Name ALUMINUM NITRATE

Hazard Class 5.1 Packing Group III

IATA

UN-No UN1438

Proper Shipping Name Aluminium nitrate

14. TRANSPORT INFORMATION

Hazard Class 5.1
Packing Group

IMDG/IMO

UN-No UN1438

Proper Shipping Name Aluminum nitrate

Hazard Class 5.1 Packing Group

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	CHINA	KECL
Aluminium nitrate nonahydrate	•		-	-	-		Χ	Χ	Χ	X	-
Aluminum nitrate	Χ	Χ	-	236-751-	-		Χ	Χ	Χ	Х	KE-
				8							01007
											Χ

Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard Yes

Clean Water Act

Not applicable

Clean Air Act

Not applicable

OSHA

Not applicable

CERCLA

Not Applicable

California Proposition 65

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Aluminium nitrate	-	X	-	-	-
nonahydrate					
Aluminum nitrate	-	X	-	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Canada

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

WHMIS Hazard Class

C Oxidizing materials D2B Toxic materials



16. OTHER INFORMATION

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Tel: (412) 490-8929

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Revision Summary "***", and red text indicates revision

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS