

ACROS ORGANICS

Material Safety Data Sheet

Creation Date 05-Oct-2010

Revision Date 05-Oct-2010

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

Aluminium nitrate nonahydrate

Cat No.

AC212240000; AC212240100; AC212241000

Synonyms

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

Recommended Use

Laboratory chemicals

Company

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

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

Upper No data available
Lower No 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 impact No information available.
Sensitivity to static discharge No 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** **Instability 2** **Physical hazards OX**

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.

Methods for Containment and Clean Up 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.

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face 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.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection 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

Physical State	Solid
Appearance	Clear
odor	odorless
Odor Threshold	No information available.
pH	2.5-3.5 5% aq.sol.
Vapor Pressure	No information available.
Vapor Density	No information available.
Viscosity	No information available.
Boiling Point/Range	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Melting Point/Range	73°C / 163.4°F
Decomposition temperature	135 °C
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	Al 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 (CO ₂), Nitrogen oxides (NO _x)
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.
<u>Chronic Toxicity</u>	
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
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14. TRANSPORT INFORMATION

DOT

UN-No	UN1438
Proper Shipping Name	ALUMINUM NITRATE
Hazard Class	5.1
Packing Group	III

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 III

IMDG/IMO

UN-No UN1438
Proper Shipping Name Aluminum nitrate
Hazard Class 5.1
Packing Group III

15. REGULATORY INFORMATION

International Inventories

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

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 nonahydrate	-	X	-	-	-
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