

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name	Aluminium nitrate nonahydrate
CAS number	7784-27-2
Synonyms	Nitric acid, aluminum salt nonahydrate

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
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#### 1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

#### 1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Serious Eye Damage/Eye Irritation	Category 1
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#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Causes serious eye damage.

Precautionary statements

Prevention: Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Aluminium nitrate nonahydrate	Nitric acid, aluminum salt nonahydrate	7784-27-2	100%
Aluminium nitrate	-	13473-90-0	-

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

#### If inhaled

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

#### In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

#### In case of eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### If swallowed

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

### 4.2 Most important symptoms and effects, both acute and delayed

Causes eye burns. Causes severe eye damage.

#### 4.3 Indication of any immediate medical attention and special treatment needed

If symptoms persist, call a physician. Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** Water spray, Carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Unsuitable extinguishing media** No information available.

#### 5.2 Specific hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition.  
Hazardous Combustion Products: Nitrogen oxides (NO<sub>x</sub>).

#### 5.3 Special 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.

#### 5.4 Further information

**Flash Point** No information available.

**Autoignition Temperature** No information available.

##### Explosion limits

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

##### NFPA

Health	Flammability	Instability	Physical hazards
2	0	-	N/A

### SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.
- 6.2 Environmental precautions**  
Should not be released into the environment. See Section 12 for additional Ecological Information.
- 6.3 Methods and materials for containment and cleaning up**  
Sweep up and shovel into suitable containers for disposal.
- 6.4 Reference to other sections**  
See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep containers tightly closed in a dry, cool, and well-ventilated place. Store under an inert atmosphere. Protect from moisture.

#### Incompatibilities

Bases. Reducing agents. Acids. Heavy metals. Cyanides.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Aluminium nitrate nonahydrate	(Vacated) TWA	2 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Aluminium nitrate nonahydrate	TWA	2 mg/m <sup>3</sup>

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### **Biological occupational exposure limits**

No information available.

## **8.2 Exposure controls**

### **Appropriate engineering controls**

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

### **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 protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### **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.

#### **Control of environmental exposure**

No information available.

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

Physical State	Solid
Appearance	Colorless
Odor	Odorless
Odor Threshold	No information available
pH	2.5-3.5, 5% aq.sol
Melting Point/Range	73 °C / 163.4 °F
Boiling Point/Range	No information available
Evaporation Rate	Not applicable
Flammability (solid)	No information available
Flammability or explosive limit	No data available

	Upper	
	Lower	
Vapor Pressure		No information available
Vapor Density		Not applicable
Density		No information available
Solubility		64 g/100ml (25°C)
Partition coefficient; n-octanol/water		No data available
Autoignition Temp		No information available
Decomposition Temp		135 °C
Viscosity		Not applicable
Molecular Formula		AlN3O9 - 9H2O
Molecular Weight		375.13 g/mol
VOC Content(%)		No information available
Oxidizing properties		No information available

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No information available.

### 10.2 Chemical stability

Hygroscopic.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products. Excess heat. Combustible material. Avoid dust formation. Exposure to moist air or water.

### 10.5 Incompatible materials

Bases, Reducing agents, Acids, Heavy metals, Cyanides.

### 10.6 Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation

Aluminum nitrate	2060 mg/kg (Rat)	-	-
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**Skin corrosion/irritation**

Irritating to skin.

**Serious eye damage/eye irritation**

Irritating to eyes.

**Respiratory or skin sensitization**

Irritating to respiratory system.

**Germ cell mutagenicity**

No information available.

**Carcinogenicity**

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Aluminum nitrate nonahydrate	7784-27-2	Not listed	Not listed	Not listed	Not listed	Not listed
Aluminum nitrate	13473-90-0	Not listed	Not listed	Not listed	Not listed	Not listed

**Specific target organ toxicity - single exposure**

None known.

**Specific target organ toxicity - repeated exposure**

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

No information available.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Do not empty into drains.

**12.2 Persistence and degradability**

Soluble in water. Persistence is unlikely based on information available.

**12.3 Bio accumulative potential**

No information available.

#### 12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility.

#### 12.5 Results of PBT and vPvB assessment

No information available.

#### 12.6 Endocrine disrupting properties

No information available.

#### 12.7 Other adverse effects

No information available.

### SECTION 13: Disposal considerations

#### 13.1 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.

### SECTION 14: Transport information

**DOT (US)** Not regulated.

**IMDG** Not regulated.

**IATA** Not regulated.

### SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**



**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Listed, Aluminium nitrate nonahydrate (CAS #7784-27-2).

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not listed.

**US. New Jersey Worker and Community Right-to-Know Act**

Listed, Aluminium nitrate nonahydrate (CAS #7784-27-2).

Listed, Aluminium nitrate (CAS #13473-90-0).

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Aluminium nitrate nonahydrate (CAS #7784-27-2).

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

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**SECTION 17: 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.