

## ALUMINIUM NITRATE (Nonahydrate) EXTRA PURE

### SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** ALUMINIUM NITRATE (Nonahydrate) EXTRA PURE

**Product Code:** 2598

**CAS#:** 7784-27-2

**Chemical Formula:**  $\text{Al}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$

**Molecular Formula:** 375.14 g/mol

**Formula Weight:** NA

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

**Substances Synonyms:** Aluminium nitrate

**Formula:**  $\text{Al}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}$

**Molecular Weight:** 375.14 g/mol

**CAS-No.:** 7784-27-2

### SECTION 3: HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Serious eye damage, (Category 1) H318: Causes serious eye damage.

#### Other hazards:

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

**Ecological information:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Toxicological information:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### SECTION 4: FIRST AID MEASURES

#### Description of first aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

**Eye Contact:** Flush eyes with water as a precaution.

**Skin Contact:** Wash off with soap and plenty of water. Consult a physician.

**Serious Skin Contact:** Not available

**Serious Inhalation:** Move person into fresh air. If not breathing, give artificial respiration. Consult a physician

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Serious Ingestion:** Not available

**Most important symptoms and effects, both acute and delay** no data available

**Indication of any immediate medical attention and special treatment needed** no data available

### SECTION 5: FIRE AND EXPLOSION DATA

#### Extinguishing media

**Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture** no data available

**Advice for firefighters** Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures** Use personal protective equipment. Avoid dust formation. Avoid breathing vapor's, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage, including any incompatibilities** Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

**Specific end use(s)** A part from the uses no other specific uses are stipulated.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure controls

#### Personal protective equipment

**Appropriate engineering controls** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Eye/face protection** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection** Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state and appearance</b>	Form	: White to off white colour crystal with chunks.
<b>Odour</b>		: Not available
<b>Taste</b>		: Not available
<b>Molecular Weight</b>		: Not available
<b>Colour</b>		: Not available
<b>pH</b>		: Not available
<b>Boiling Point</b>		: Not available
<b>Melting Point</b>		: Not available
<b>Critical Temperature</b>		: Not available
<b>Specific Density</b>		: Not Available
<b>Vapor Pressure</b>		: Not Available
<b>Vapor Density</b>		: Not available
<b>Volatility</b>		: Not Available
<b>Odor Threshold</b>		: Not Available
<b>Water/Oil Dist. Coeff.</b>		: Not Available
<b>Ionicity (in Water)</b>		: Not Available
<b>Dispersion Properties</b>		: Not Available
<b>Solubility</b>		: Not available



## SECTION 10: STABILITY AND REACTIVITY DATA

**Reactivity** no data available

**Chemical stability** Stable under recommended storage conditions.

**Possibility of hazardous reactions** Risk of explosion with: Reducing agents, Cyanides, Esters, Strong acids, Isocyanates, Powdered metals and sulfur

**Conditions to avoid** moisture. No information available

**Incompatible materials** various metals, Mild steel

**Hazardous decomposition products** no data available

**Other decomposition products** no data available

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute toxicity:

LD50 Oral - Rat - male and female - 3.263 mg/kg (OECD Test Guideline 401)

Symptoms: Possible damages: mucosal irritations, Cough

LD50 Dermal - Rabbit - male and female - > 5.000 mg/kg (OECD Test Guideline 402)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Aluminium sulphate hydrate

#### Skin corrosion/irritation:

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Aluminium nitrate

#### Serious eye damage/eye irritation:

Eyes - Rabbit

Result: Causes serious eye damage. (OECD Test Guideline 405)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Aluminium nitrate

#### Respiratory or skin sensitization:

Maximization Test - Guinea pig

Result: Does not cause skin sensitization. (OECD Test Guideline 406)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: aluminum chloride hexahydrate

The value is given in analogy to the following substances: aluminium(III) chloride, anhydrous

**Germ cell mutagenicity:** No data available

**Carcinogenicity:** No data available

**Reproductive toxicity:** No data available

**Specific target organ toxicity:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

## SECTION 12: ECOLOGICAL INFORMATION

**Toxicity** no data available

**Persistence and degradability** no data available

**Bio-accumulative potential** no data available

**Mobility in soil** no data available

**Results of PBT and vPvB assessment** PBT/vPvB assessment This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

**Other adverse effects** no data available

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal:** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### SECTION 14: TRANSPORT INFORMATION

**UN number:**

**ADR/RID:** 1438

**IMDG:** 1438

**IATA:** 1438

**UN proper shipping name**

**ADR/RID:** ALUMINIUM NITRATE (Nonahydrate)

**IMDG:** ALUMINIUM NITRATE (Nonahydrate)

**IATA:** aluminium nitrate (nonahydrate)

**Transport hazard class(es):**

**ADR/RID:** 5.1

**IMDG:** 5.1

**IATA:** 5.1

**Packaging group:**

**ADR/RID:** III

**IMDG:** III

**IATA:** III

**Environmental hazards:**

**ADR/RID:** no

**IMDG Marine pollutant:** no

**IATA:** no

### SECTION 15: OTHER REGULATORY INFORMATION

**Regulatory information:** This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Chemical Safety Assessment:** For this product a chemical safety assessment was not carried out

### SECTION 16: OTHER INFORMATION

**References: Full text of H AND R-Statements**

H318: Causes serious eye damage.

LD50 Oral - Rat - male and female - 3.263 mg/kg

LD50 Dermal - Rabbit - male and female - > 5.000 mg/kg

**Other Special Considerations:** Not available.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.

