#### SDS 927 Aluminium Nitrate

Date of Issue/re-issue: 05/12/2018 Expiry 01/01/2024

#### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name ECP Limited

Address: 39 Woodside Ave, Northcote, Auckland, New Zealand

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0800 CHE M CA LL		

Product	Aluminium Nitrate Code					927
CAS#	HSNO#	UN#	DG	Packing group # Tracking?		Handlers
			Class/es			Certificate?
7784-27-2	HSR006895	1438	5.1	III	No	No

**Recommended use:** Laboratory Investigations

### 2. Hazards identification

2.1 GHS Classification

Oxidizing liquids or solids (Category C)

Acute toxicity, Oral (Category E)

Skin irritation (Category A)

Eye irritation (Category A)

2.2 GHS Label elements, including precautionary statements



**Pictogram** 

Signal word Warning

Hazard statement(s)

H272 May intensify fire; oxidizer.

H303 May be harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

Prevention

P210 Keep away from heat.

P220 Keep/Store away from clothing/ combustible materials.

P221 Take any precaution to avoid mixing with combustibles.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

#### 2.3 Other hazards

None

## 3. Composition/information on ingredients

Substance/Mixture:

Substance

3.1 Substances

Hazardous components

Component	Classification	Concentration		
Aluminium nitrate nonahydrate				
	5.1.1 C; 6.1 E; 6.3A; 6.4 A;	<=100%		
	H272, H303, H315, H319			

### 4. First aid measures

4.1 Description of first aid measures

General advice

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

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed No data available

#### 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

#### 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 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 for disposal.

## 7. Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place.

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

No data available

## 8. Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

8.1 Control parameters

Occupational Exposure Limits Table

Component	CAS No	Value	Control parameters	Basis
Aluminium	7784-27-2	WES-	5 mg/m <sup>3</sup>	New Zealand. Workplace Exposure
nitrate		TWA		Standards for Atmospheric
nonahydrate				Contaminants

#### 8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses

Use equipment for eye protection tested and approved under appropriate government standards.

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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

**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. Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

## 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance

Form: solid

Colour: colourless

b) Odour

No data available

c) Odour Threshold

No data available

d) pH 2.5 - 3.5 at 50 g/l at 25 °C

e) Melting point/freezing point

Melting point/range: 73 °C - lit.

f) Initial boiling point and boiling range

No data available

g) Flash point

Not applicable

h) Evaporation rate

No data available

i) Flammability (solid, gas)

No data available

j) Upper/lower flammability or explosive limits

No data available

k) Vapour pressure

No data available

I) Vapour density

No data available

m) Relative density

No data available

n) Water solubility

No data available

o) Partition coefficient: n-octanol/water

No data available

p) Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

r) Viscosity

No data available

### 10. Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid moisture.

10.5 Incompatible materials

Strong reducing agents, Powdered metals, Strong acids

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions

Nitrogen oxides (NOx), Aluminum oxide

Other decomposition products

No data available

#### 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Skin - Rabbit - No skin irritation - OECD Test Guideline 404

Serious eye damage/eye irritation

Eyes - Rabbit - Severe eye irritation - OECD Test Guideline 405

Respiratory or skin sensitisation

Guinea pig - Does not cause skin sensitisation. - OECD Test Guideline 406

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Reproductive toxicity - Rat - Oral Effects on Newborn: Physical. Developmental Toxicity - Rat - Oral

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Effects on Embryo or Fetus: Fetal death.

Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

Developmental Toxicity - Rat - Oral

Specific Developmental Abnormalities: Musculoskeletal system.

Developmental Toxicity - Rat - Oral

Specific Developmental Abnormalities: Cardiovascular (circulatory) system.

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation

May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

Causes eye burns.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information** 

RTECS: BD1050000

## 12. Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

### 13. Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

## 14. Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations	
14.1	UN Number	1438	1438	1438	
14.2	UN Proper Shipping name	ALUMINIUM NITRATE	ALUMINIUM NITRATE	Aluminium nitrate	
14.3	Transport Hazard Class	5.1	5.1	5.1	
14.4	Packaging group	III	III	III	
14.5	Environmental Hazards	No	No	No	
14.6	Special precautions for user	No data available.			

# 15. Regulatory information

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

National regulatory information HSNO Approval Code: HSR006895

HSNO Group Standard Approval: HSR002693 - Laboratory Chemicals and Reagent Kits (Oxidising

[5.1.1]) Group Standard 2006 Tracking

Required: not required

Approved Handler Cert.: not required

## 16. Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to

such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.