

SDS 1170 Aluminium Sulfate

Date of Issue/re-issue: 06/12/2023 Expiry 06/12/2028

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name **ECP Limited**
Address: 39 Woodside Ave, Northcote, Auckland , New Zealand

Emergency Tel: 0800 243 622 or0800 CHE M CA LL	Tel +64 9 480 4386	FAX +64 9 480 4385
---	--------------------	--------------------

Product	Aluminium Sulfate Octadecahydrate				Code	11701 ; 11708; 11709
CAS#	HSNO#	UN #	DG Class/es	Packing group #	Tracking?	Handlers Certificate?
7784-31-8	HSR004337	3260	8	III	No	No

Recommended use: Laboratory Investigations

2. Hazards identification

2.1 GHS Classification

- Corrosive to Metals (Category 1), H290
- Acute toxicity, Oral (Category 4), H302
- Skin corrosion/irritation (Category 2), H315
- Serious eye damage/eye irritation (Category 2), H319
- Hazardous to the aquatic environment - chronic hazard (Category 2), H411

2.2 GHS Label elements, including precautionary statements



Pictogram

Signal word **Warning**

Hazard statement(s)

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

Prevention

- P264 Wash skin thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ eye protection/ face protection.

Response

- P337 + P313 If eye irritation persists: Get medical advice/ attention.
- P390 Absorb spillage to prevent material damage.
- P391 Collect spillage.

2.3 Other hazards

None

3. Composition/information on ingredients

Formula: $Al_2O_{12}S_3 \cdot 18H_2O$

Molecular weight: 666.41 g/mol

Component	Concentration
Aluminium sulfate octadecahydrate	
CAS No.	7784-31-8
	<=100%

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

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation).

Call a physician immediately. Do not attempt to neutralise.

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

Wear respiratory protection. 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 Table

Component	CAS No	Value	Control parameters	Basis
Aluminium sulfate dodecahydrate	7784-31-8	TWA	5 mg/m ³	New Zealand. Workplace Exposure Standards for Atmospheric 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 type or type 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: powder

Colour: white

b) Odour

No data available

c) Odour Threshold

No data available

d) pH

No data available

- e) Melting point/freezing point
Melting point/range: 86.5 °C
- 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
- l) Vapour density
No data available
- m) Relative density 1.690 g/cm³
- 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

Air Exposure to moisture

10.5 Incompatible materials

Incompatible with strong bases and oxidizing agents.

Ammonia, Water, Amines

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sulphur oxides, Aluminium oxide

Other decomposition products - No data available

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - > 2140 mg/kg

Skin corrosion/irritation

Skin - Rabbit - No skin irritation

Serious eye damage/eye irritation

Eyes - Rabbit - Severe eye irritation

Respiratory or skin sensitisation

No data available

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

No data available

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: Not available

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	3260	3260	3260
14.2	UN Proper Shipping name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Aluminium sulphate hydrate)	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Aluminium sulphate hydrate)	Corrosive solid, acidic, inorganic, n.o.s. (Aluminium sulphate hydrate)
14.3	Transport Hazard Class	8	8	8
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: HSR004337

HSNO Group Standard Approval: HSR002596 - Laboratory Chemicals and Reagent Kits 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.

END**END*****END*****END*****END*****END***