

SAFETY DATA SHEET

Version 2.0 Issue Date: 29 April 2025

1. Substance and Supplier Identification

Product Name:	Sulphate of Ammonia
Other Names:	Ammonium Sulphate, Ammonium Sulfate, Sulphuric acid diammonium salt, GAS, SAS.
Supplier:	Morton Smith-Dawe Ltd
	12 Kairua Road
	Hornby
	Christchurch, New Zealand
	P.O Box 37-139 Halswell, Christchurch
Customer Centre:	(03) 322 8117
Recommended Use:	Fertiliser
In Case of Emergency Contact:	
National Poisons Centre:	0800 POISON (0800 764 766)
Transport Emergency:	111 – Tell operator what service is needed: Fire, Ambulance or Police.

2. Hazard Identification

New Zealand Hazardous Substances Classification:

This product is classified as hazardous according to criteria in the New Zealand Hazardous Substances (Hazard Classifications) Notice 2020.

Refer to Section 15 for HSNO Approval Number.

This product is not a Dangerous Goods for Transport. Refer to Section 14 for details.

Classification and Statements:

GHS Classification:

Acute Toxicity, oral, Category 4 Hazardous to Terrestrial Vertebrates HSNO Classification:

6.1D oral, acutely toxic9.3C harmful to terrestrial vertebrates

Labelling Elements:

Hazard Statements:

H302 Harmful if swallowed. Hazardous to terrestrial vertebrates.

Signal Word: WARNING

GHS Pictograms:



PREVENTION STATEMENTS:

P102 - Keep out of reach of children.

P103 - Read carefully and follow all instructions.

P264 - Wash hands, exposed skin, thoroughly after handling.

P270 - Do not eat, drink, or smoke when using this product.

P273 - Avoid release to the environment.

RESPONSE STATEMENTS:

P101 – If medical advice is needed, have product container or label at hand.

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 - Rinse mouth.

STORAGE STATEMENTS: None

DISPOSAL:

P501 - In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Dispose of via an approved waste disposal contractor. Refer to Section 13 of the SDS.

3. Composition/ Information on Ingredients

Single substance:

Main Component	CAS Number	Concentration (% wt)
Ammonium Sulphate	7783-20-2	100 %

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First Aid Measures

Workplace Facilities Eye wash and safety shower facilities should be provided. Required:

If Inhaled:	Remove to fresh air. Seek medical attention if symptoms persist.
In Contact with Eye:	Hold eyes open, flush continuously with water for at least 15 minutes. Seek medical attention if irritation develops and persists.
In Contact with Skin:	Wash skin with plenty of water, while removing contaminated clothing and shoes. Wash contaminated clothing before re-use. Seek medical attention if skin irritation develops and persists.
If Swallowed:	DO NOT INDUCE VOMITING. Rinse mouth. Give small quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention. If vomiting occurs, keep head below hips to prevent aspiration to lungs.
Advice to Doctor:	Treat symptomatically.

5. Fire Fighting Measures

Fire/Explosion Hazard:	Product is not flammable or combustible. However, generation of fine dust may cause a dust explosion.
Suitable Extinguishing Media:	Use extinguisher suitable for surrounding fire.
Precautions in Connection with Fire:	May give off toxic and/or corrosive fumes in a fire, containing nitrogen and sulphur oxides.
Advice for firefighters:	Wear full firefighting gear and self-contained breathing apparatus.

6. Accidental Release Measures

Personal Precautions:	Avoid contact with skin and eyes. Avoid generating dust. Avoid release to the environment. For large spills, emergency responders must use personal protective equipment, including gloves, protective overalls and footwear and safety glasses with side shields or safety goggles. Respiratory protection may be required where there is inadequate ventilation and high dust concentrations. For small spills, wear eye protection and gloves.
Spill Clean-Up Procedure:	Contain the spill. Sweep up spills and place in a suitable, closable chemical waste container. Ensure waste container is properly labelled.
Waste Disposal:	Refer to Section 13.
Emergency Preparation:	Ensure there is appropriate and adequate personal protective equipment, trained personnel and clean up materials for management of accidental release.

7. Handling and Storage

Handling:	Keep out of reach of children. Avoid generating dust. Avoid release to the environment. Avoid contact with skin and eyes. Do not eat, drink, or smoke, when using this product. Remove contaminated clothing and wash hands and face before entering eating areas.
Storage:	Do not store near to food or feedstuffs. Store in a cool, dry, well-ventilated place.

8. Exposure Controls and Personal Protection

Workplace Exposure Standards NZ:

Particulates, not otherwise specified: TWA 10 mg/m³ (inspirable dust), 3 mg/m³ (respirable dust)

Engineering Controls:	Eyewash facilities and safety showers should be provided in the work area where there is a risk of exposure to eyes and skin. If use generates dust, use engineering controls such as local exhaust ventilation to ensure workers are not exposed to levels exceeding the exposure standards.
Personal Protective Equipment:	Avoid contact with skin and eyes. Avoid inhaling dust.
Hand protection:	Wear protective gloves. Refer to Australian and New Zealand Standard AS/NZS 2161 for protective gloves.
Skin and body protection:	Use protective clothing. Remove any contaminated clothing to avoid prolonged contact with the skin. Wash work clothes regularly. Refer to Australian and New Zealand Standard AS/NZS 4501 for occupational protective clothing.
Eye protection:	Use safety glasses with side shields or safety goggles to protect eyes. Refer to AS/NZS 1336 for suitable eye and face protection.
Respiratory protection:	Dust mask rated at least P1 if exposure to dust is low. For higher dust concentrations a P2 mask may be needed. Refer to AS/NZS 1715 and AS/NZS 1716 for suitable respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Other information:	PPE selected must be impervious to the substance. Do not eat, smoke, or drink where material is handled, processed, or stored. Wash hands carefully before eating or smoking. Handle in accordance with safe industrial hygiene practices.

9. Physical and Chemical Properties

Description:	Solid crystalline, granular	Colour:	White to grey/brown or clear
Odour:	Odourless	Odour Threshold:	Not determined
рН (20°С):	5-6 (5% solution)	Solubility (water, 20°C):	Soluble (744 g/L)
Melting Point:	280°C (Decomposes)	Boiling point:	Not determined

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Flammability:	Non-flammable	Flash Point (Closed Cup):	Not applicable
UEL/LEL:	Not applicable	Bulk Density:	1050 kg/m ³
Relative Density:	1.77 (water = 1)	Vapour Density:	Not determined
Vapour pressure (at 25°C):	Not determined	Viscosity:	Not applicable
Decomposition Temp:	280°C	Autoignition Temp:	Not applicable
Octanol/Water Partition Coefficient:	Not applicable	Particle characteristics:	Not available

10. Stability and Reactivity

Stability:	Stable under normal storage conditions.
Reactivity:	Reacts with caustics to form ammonia. Reacts violently with potassium chlorate. When hot reacts with nitrates, nitrites, chlorates. Attacks metals.
Conditions to Avoid:	High temperatures. Dust formation, accumulation of large quantities of dust may result in a dust explosion.
Incompatibility:	Incompatible with strong alkalis, sulphuric acid, aliphatic amines, alkanolamines, amides, organic anhydrides, isocyanates, vinyl acetate, alkylene oxides, epichlorohydrin, potassium plus ammonium nitrate, sodium- potassium powder plus ammonium nitrate. Mixtures with sodium hypochlorite form unstable, explosive nitrogen trichloride
Hazardous Polymerisation:	Will not occur.
Hazardous Decomposition:	May form toxic fumes containing oxides of nitrogen and sulphur.

11. Toxicological Information

Acute Exposure

Acute Toxicity:	LD ₅₀ oral 640 mg/kg (mouse) LD ₅₀ dermal > 5000 mg/kg LC ₅₀ inhalation > 5 mg/L (dust)
Inhalation:	Inhalation of dust may cause coughing and shortness of breath.
Ingestion:	Harmful if swallowed. Ingestion of large quantities may cause nausea, vomiting, diarrhoea, and gastrointestinal irritation.
Skin Corrosion/Irritation:	Not expected to be a skin corrosive or irritant.
Serious Eye Damage/Eye Irritation:	Not expected to be an eye corrosive or irritant.
Respiratory or Contact Sensitiser:	Not expected to be a respiratory or contact sensitiser.

Chronic Exposure:

Mutagen/Carcinogen/Reproductive Toxicant	Not expected to be carcinogenic, mutagenic or a reproductive or
	developmental toxicant.

Specific Target Organ Toxicity Single Exposure:	No information available. Not expected to be a specific target organ toxicant by single exposure.
Specific Target Organ Toxicity Repeated Exposure:	No information available. Not expected to be a specific target organ toxicant by repeated exposure.
Aspiration Hazard:	No information available. Not expected to be an aspiration hazard.
	Toxicity data is based on hazardous ingredient information and information in the European Chemical Agencies Database.

12. Ecological Information

Ecotoxicity:	LD ₅₀ oral (mouse) 640 mg/kg. Harmful to terrestrial vertebrates. Avoid unintended release to the environment.	
Aquatic toxicity:	Not expected to have harmful long-term effects in the aquatic environment. $LC/EC_{50} > 100 mg/L$.	
Biodegradable:	No data.	
Bioaccumulative:	No data.	
Mobility in soil:	Product is soluble in water.	
Other adverse effects:	None known.	
Ingredients with ecotoxic classifications:	Ammonium Sulphate is harmful to terrestrial vertebrates via ingestion.	
	There are no other ingredients with ecotoxicity classifications.	

Ecotoxicity data is based on hazardous ingredient classification information.

13. Disposal Considerations

Disposal:	Recycle where possible. Dispose of waste product via an approved waste disposal contractor.	
Disposal of Packaging:	Dispose of packaging via an approved waste disposal contractor. Consumer packaging may be disposed of via household waste.	

14. Transport Information

This product is not classified as a Dangerous Good for transport in accordance with NZS5433:2020, IMDG or IATA.

Ensure transportation methods prevent leakage from packages and collapsing loads.

15. Regulatory Information

Group Standard Allocation:	Fertilisers (Subsidiary Hazard) Group Standard 2020		
HSNO Approval Code:	HSR002571		
NZ Inventory of Chemicals:	All components are listed in the NZ Inventory of Chemicals		
This substance triggers:	Location/Compliance Certificate Certified Handler Emergency Response Plan Secondary Containment Signage	N/A N/A 1,000kg N/A 10,000kg	
	This substance is not required to be Tracked. All workplace per handling this substance are required to be trained on the safe handl PPE requirements for the hazards associated with this substance.		

16. Other Information

The information provided in this Safety Data Sheet relates only to the specific material designated herein. The information contained in this Safety Data Sheet is correct to the best of our knowledge.

This substance is approved under HSNO for use as a fertiliser.

SDS Created:	29 April 2025	Review Date:	29 April 2030
Supersedes:	27 June 2022		

Reason for Revision: New address details. Update headings and information in Sections 11, 12, & 16.

It is known that people have varying degrees of sensitivity to chemicals therefore this product should be used with caution.

The information compiled in this Safety Data Sheet has been taken from sources believed to be reliable by Morton Smith-Dawe Ltd and to represent the most up-to-date knowledge available at the date given in Section 16.

Morton Smith-Dawe Ltd assumes no liability for any damages related to the use or misuse of this substance.

References:

EPA NZ Chemical Classification and Information Database EPA Guide: Guide to Classifying Hazardous Substances in New Zealand, Version 1

Summary of Abbreviations: EPA – Environmental Protection Authority

GHS – Global Harmonisation System

- CAS Chemical Abstracts Service
- TWA Time Weighted Average

End of Safety Data Sheet