

# **SAFETY DATA SHEET**

Version 1.0 Issue Date: 27 June 2022

# 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

396 Wigram Road

Halswell

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

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HSNO Classification: 6.1D oral, acutely toxic

9.3C 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

Required:

Eye wash and safety shower facilities should be provided.

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

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grey/brown or

Not applicable

clear

Odour: Odourless **Odour Threshold:** Not determined 5-6 (5% solution) pH (20°C): Solubility (water, 20°C): Soluble (744 g/L) **Melting Point:** 280°C (Decomposes) **Boiling point:** Not determined Flammability: Non-flammable Flash Point (Closed Cup): Not applicable **UEL/LEL:** Not applicable **Bulk Density:** 1050 kg/m<sup>3</sup> 1.77 (water = 1) **Relative Density:** Vapour Density: Not determined

Vapour pressure (at

25°C):

Not determined

Viscosity: Not applicable

280°C **Decomposition Temp:** 

**Octanol/Water Partition** 

Not applicable Coefficient:

Particle characteristics: Not available

# 10. Stability and Reactivity

Stability: Stable under normal storage conditions.

Reacts with caustics to form ammonia. Reacts violently with potassium Reactivity:

chlorate. When hot reacts with nitrates, nitrites, chlorates. Attacks metals.

**Autoignition Temp:** 

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, sodiumpotassium 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<sub>50</sub> 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 Contact:** Not expected to be a skin irritant.

**Eye Contact:** Not expected to be an eye irritant.

Not expected to be a respiratory or contact sensitiser. Sensitiser:

**Chronic Exposure:** 

Mutagen/Carcinogen/Reproductive

**Toxicant** 

No chronic toxicity effects expected.

**Specific Target Organ Systemic** 

Toxicity:

No known effects.

Toxicity data is based on hazardous ingredient information and information in the European Chemical Agencies Database.

# 12. Ecological Information

Ecotoxicity: Not expected to have harmful long-term effects in the aquatic environment.

LD<sub>50</sub> oral (mouse) 640 mg/kg. Harmful to terrestrial vertebrates.

Avoid unintended release to the environment.

Aquatic toxicity:  $LC/EC_{50} > 100 \text{ mg/L}.$ 

Biodegradable: No data.
Bioaccumulative: No data.

Mobility: Soluble in water.

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

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This substance triggers:

Location/Compliance Certificate N/A
Certified Handler N/A
Emergency Response Plan 1,000kg
Secondary Containment N/A
Signage 10,000kg

This substance is not required to be Tracked. All workplace personnel handling this substance are required to be trained on the safe handling and 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: 27 June 2022

Review Date: 27 June 2027

Reason for Revision: Compliance with EPA Hazardous Substances (Safety Data Sheets) Notice 2017.

Update of classifications in accordance with EPA Hazardous Substances (Hazard

Classifications) Notice 2020.

Note: the former approval number for Ferrous Sulphate Heptahydrate HSR003427 has been revoked. As such the classifications in the European Chemical Agencies Database have been used along with the New Zealand specific Hazardous to Terrestrial Vertebrates classification for Agrichemicals.

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.

**End of Safety Data Sheet**