



Safety Data Sheet

Sulphate of Ammonia


UPDATED: 03 September 2020

Section 1: SUBSTANCE IDENTIFICATION & SUPPLIER

Product Name:	Sulphate of Ammonia
Other Names:	GAS, SAS, Ammonium sulfate, Sulphuric acid diammonium salt, Ammonia Sulphate
Product Code:	4000000, 4090000
Chemical Formula:	$(\text{NH}_4)_2\text{SO}_4$
Recommended Use:	Fertiliser
Company Identification:	Morton Smith - Dawe Limited
Address:	396 Wigram Road, Halswell, Christchurch PO Box 37 - 139 Halswell
Customer Centre:	03 322 8117
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Phone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone Number:	111 - Tell operator what service is needed: Fire, Ambulance or Police

Section 2: HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No:	Fertilisers (subsidiary) – HSR002571 HSR002770 - Ammonium Sulphate
Pictograms	
Signal Word:	Warning

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1D (oral)	H302	Harmful if swallowed.	Acute Tox. 4
9.1D	H402	Harmful to aquatic life.	Aquatic Chronic 4
9.3C	H433	Harmful to terrestrial vertebrates.	

Prevention Code:	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.

Response Code:	Response Statement:
P101	If medical advice is needed, have product container or label at hand.

P330	Rinse mouth.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3: COMPOSITION IDENTIFICATION

INGREDIENT	CAS No.	CONTENT
Ammonium Sulphate	7783-20-2	100%

Section 4: FIRST AID MEASURES

Routes of Exposure:	
If in eyes:	Flush with plenty of water for several minutes, holding eyelids open if necessary. Remove contact lenses if present and easy to do. Seek medical advice.
If on skin	Wash affected area thoroughly with soap and water. Seek medical attention if needed.
If ingested:	Never give anything by mouth to an unconscious person. If swallowed, rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.
If Inhaled:	Remove patient to fresh air. Keep at rest in comfortable position for breathing. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance if needed.
Most important symptoms and effects, both acute and delayed	
Symptoms:	
Eyes:	Not triggered however direct contact may result in lachrymation (tears), pain, redness and conjunctivitis.
Skin:	Not applicable however prolonged and repeated skin exposure may result in irritation and skin rash.
Ingested:	Harmful if swallowed. Ingestion of large quantities may lead to nausea, vomiting, diarrhea, thirst.
Inhaled	Not triggered however over exposure may cause mucous membrane irritation and coughing.
Notes to Doctor:	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Hazard Type	Not applicable (non-flammable)
Hazardous Combustion Products:	Non-combustible. Decomposes on heating to form ammonia, nitrogen oxides and sulphur oxides
Extinguishing Media:	Based on surrounding materials.
Protective Equipment:	Breathing apparatus, goggles, and protective gloves.
HAZCHEM Code:	None allocated

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective clothing as detailed in Section 8. Exclude non-essential people from the area.

Environmental precautions:

Avoid unintended release of excessive amounts into waterways or sewers.

Methods and material for containment and cleaning up:

Contain spill and sweep up. Collect and place in sealable containers. Avoid generating dust. Reuse or recycle where possible. Dispose of according to Section 13.

Section 7: HANDLING AND STORAGE


Handling:	<p>Read label before use. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid generating dusts, do not breathe dusts. Avoid release to the environment.</p>
Storage:	<p>Keep out of reach of children. Store away from incompatible materials listed in Section 10. Store in a cool, dry area.</p>

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg / m ³	ppm	mg / m ³
Inspirable dust:	-	10	-	-
Respirable dust:	-	3	-	-

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2019 11TH EDITION.

Engineering Controls:	Handle in well-ventilation area. If dust generated use local extraction to control. Avoid inhalation of dust.
Personal Protection Equipment:	
	
Eyes:	Wear safety goggles. Eye wash facilities should be available.
Skin / Hands:	Wear protective gloves and overalls.
Respiratory:	If dust is present wear a dust mask.
General:	Remove protective clothing and wash hands and face before meals and after work.

Section 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Granular/Crystalline
Colour:	White to grey/brown or clear
Odour:	Odourless

Section 9: PHYSICAL & CHEMICAL PROPERTIES

Odour Threshold:	Not available
pH:	5 – 6 (50g/l in water at 20 °C)
Boiling Point:	Not Available
Melting Point:	280 °C (decomposes)
Freezing Point:	Not Available
Flash Point:	Not Available
Flammability:	Not Flammable
Upper/Lower Flammability or Explosive Limits:	Not Available
Vapour Pressure:	Not Available
Vapour Density:	Not Available
Specific Gravity:	1.77 g/cm ³
Bulk Density:	1050 kg/m ³
Water Solubility:	744 g/l at 20 °C
Partition Coefficient:	Not Available
Auto-Ignition Temperature:	Not Available
Decomposition Temperature	Not Known
Kinematic Viscosity	Not Available
Particle Characteristics:	Not Available

Section 10: STABILITY & REACTIVITY

Stability of Substance:	This product is stable under normal conditions.
Possibility of hazardous reactions:	Not Available
Hazardous Decomposition Products:	Decomposes on heating to form ammonia, nitrogen oxides and sulphur oxides.
Incompatible Materials:	Strong heat, moisture.
Materials to Avoid:	Oxidisers.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Ingestion:	Harmful if swallowed. Ingestion of large quantities may lead to nausea, vomiting, diarrhea, thirst. LD50 (oral, rat) 2840 mg/kg
Dermal:	Not applicable.
Inhalation:	Not triggered however over exposure may cause mucous membrane irritation and coughing.
Skin:	Not applicable however prolonged and repeated skin exposure may result in irritation and skin rash.
Eye:	Not triggered however direct contact may result in lachrymation (tears), pain, redness and conjunctivitis.

Chronic Effects:

Carcinogenicity:	Not applicable.
Reproductive Toxicity:	Not applicable.
Germ Cell Mutagenicity:	Not applicable.
Aspiration:	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Section 12: ECOLOGICAL INFORMATION

Hazard Classifications:	9.1D = Harmful to aquatic life. 9.3C = Harmful to terrestrial vertebrates.
Product:	
Persistence and degradability	No data available.
Bioaccumulation	No data available.
Mobility in Soil	No data available.
Other adverse effects	Avoid unintended release into streams and waterways.

Individual component information (Please refer to www.epa.govt.co.nz for full details):

Ammonium Sulphate (Cas No 7783-20-2):

Route	Species	Duration	Value LC50/EC50
Acute aquatic, fish	Catla catla	96 hr	48 mg/L
Acute aquatic, Crustacean	Crangon crangon (Crustacea)	96 hr	81-130 mg/L
Bioaccumulative	No		
Rapidly Degradable	Yes		

Section 13: DISPOSAL INFORMATION

Disposal Method:	Collection into sealable containers and dispose of in an appropriate land fill. Reuse or recycle where possible. If practicable apply excess fertiliser at recommended rates to appropriate land. Observe any local authority restrictions that may apply.
Container Disposal:	Rinse containers thoroughly prior to reuse. Otherwise render unusable and dispose of as waste.
Precautions or methods to avoid:	Unacceptable disposal methods include, but are not limited to, burning, burying and dumping. Do not allow to enter waterways.

Section 14: TRANSPORT INFORMATION

This product is **NOT** classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Section 15: REGULATORY INFORMATION

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code:	Fertilisers (subsidiary) – HSR002571 HSR002770 (Ammonium Sulphate)
HSNO Classification:	6.1D(oral), 9.1D, 9.3C

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000kg (9.3C)
Emergency Response Plan	1000kg (6.1D)
Secondary Containment	1000kg (6.1D)
Restriction of Use	Only use for the intended purpose.

Section 16: OTHER INFORMATION

Glossary:

EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSN	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

- 1.EPA Hazardous Substances (Safety Data Sheets) Notice 2017
- 2.Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
- 3.Assigning a hazardous substance to a HSN Approval (Aug 2013).
- 4.Transport of Dangerous goods on land NZS 5433:2012
- 5.HSW (Hazardous Substances) Regulations 2017

This Safety Data Sheet was updated on the date shown and supersedes all previous versions.

Disclaimer

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Please contact Morton Smith - Dawe, if further information is required.

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