

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 29-Oct-2025

Revision date 21-Apr-2026

Revision Number 5

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code(s)	21816
Safety data sheet number	21816
Product Name	AMMONIUM SULPHATE
EC Number	231-984-1
CAS No	7783-20-2
Synonyms	AMMONIUMSULFAT MIN 99,6%, AMMONIUMSULFAT MIN 99%, AMMONIUMSULFAT HP GRADE, Ammoniumsulphate 11225, AMMONIUMSULPHATE CA 21%N, AMM SULPHATE TECH, AMM SULPHATE FCC, AMMONIUM SULPHATE T, AMM SULPHATE PREMIUM, ASPURE PREMIUM, AMMONIUM SULPHATE E 517, ASPURE INDUSTRIAL, AMM SULPHATE BSF
Pure substance/mixture	Substance
Formula	H3N.1/2H2O4S
Molecular weight	132.1395 g/mol

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use	Fertilisers Insecticide Herbicide Fungicide pH control Flame retardant Chemical intermediate Laboratory chemicals Adjuvants Consumer use Industrial use Professional use
Uses advised against	Food additive Pharma Active ingredients

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com

Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

Not classified

Hazard statements

Not classified

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
AMMONIUM SULPHATE 7783-20-2	> 99.8%	231-984-1	-	Not Classified	-	-	-

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Move into fresh air and keep at rest. Do not get in eyes, on skin, or on clothing.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	After inhalation of decomposition products: Risk of pulmonary edema. Symptoms can appear later.
Eyes	Solid particles trapped behind the eyelid may cause abrasive damage,.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically. After inhalation of decomposition products: Pulmonary odema prophylaxis.
------------------------	---

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical, CO ₂ , alcohol-resistant foam or water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	When heated and in case of fire, toxic vapours/gases may be formed.
Hazardous combustion products	Carbon oxides. Nitrogen oxides (NO _x). Oxides of sulphur. Ammonia. Amine.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
---	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Provide adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid generation of dust.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Take up mechanically, placing in appropriate containers for disposal. Avoid generation of dust. After cleaning, flush away traces with water.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Do not breathe dust. Avoid generation of dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

General hygiene considerations Do not eat, drink or smoke when using the product. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Keep away from food, drink and animal feedingstuffs. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Protect from humidity. Store away from the following materials. Water. alkali. Nitrites. Nitrates. Strong oxidising agents. Alkali metals. The substance/product may cake under the influence of moisture. Keep away from heat, sparks and open flame.

7.3. Specific end use(s)

Specific use(s)
See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
AMMONIUM SULPHATE 7783-20-2		42.667 mg/kg/day [4] [6]	11.167 mg/m ³ [4] [6]

[4] Systemic health effects.
[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
AMMONIUM SULPHATE 7783-20-2	6.4 mg/kg/day [4] [6]	12.8 mg/kg/day [4] [6]	1.667 mg/m ³ [4] [6]

[4] Systemic health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
AMMONIUM SULPHATE 7783-20-2	0.312 mg/l	0.53 mg/l	0.0312 mg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
AMMONIUM SULPHATE 7783-20-2	0.063 mg/kg		16.18 mg/l	62.6 mg/kg	

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN ISO 16321-1.

Hand protection Wear suitable gloves. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
	Wear protective butyl rubber gloves	>= 0.5 mm	>480 minutes
	Wear protective nitrile rubber gloves	>=0.35 mm	>480 minutes
	Polyvinyl chloride (PVC)	>= 0.5 mm	> 480 minutes
	Chloroprene rubber (CR)	>= 0.5 mm	> 480 minutes

	Fluoroelastomer	≥ 0.4 mm	> 480 minutes
--	-----------------	---------------	---------------

Skin and body protection	Wear appropriate clothing to prevent reasonably probable skin contact.
Respiratory protection Recommended filter type:	In case of inadequate ventilation wear respiratory protection. Particulate filter P1. or. Particulate filter, type P2. or. Dust filter P3 (for especially fine dust/powder). or. Mask filter for respirable fine particles (FFP2). Particulates filter conforming to EN 143. EN 149.
General hygiene considerations	Do not eat, drink or smoke when using the product. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Keep away from food, drink and animal feedingstuffs. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid	
Appearance	solid Crystalline	
Colour	Colourless To white	
Odour	Odourless.	
Odour threshold	Not applicable	
Property	Values	Remarks • Method
Melting point / freezing point	> 280 °C	
Initial boiling point and boiling range		Not applicable. Decomposes prior to boiling.
Flammability		The product is not flammable.
Flammability Limit in Air		Product does not present an explosion hazard.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point		Not applicable. solid.
Autoignition temperature	> 400 °C	Substance decomposes before self ignition can occur.
Decomposition temperature	> 235 °C	
pH		No information available.
pH (as aqueous solution)	5 - 6	solution (5 %).
Kinematic viscosity		Not applicable. solid.
Dynamic viscosity		Not applicable. solid.
Water solubility	Soluble in water 766 g/l @ 25 °C	
Solubility(ies)	Insoluble in: Alcohol Acetone Ether	
Partition coefficient		Not applicable. Inorganic substance.
Vapour pressure	4053 e-9 hPa ~ < 0.1 hPa < 0.01 kPa	@ 25 °C. @ 25 °C.
Relative density	1.77 - 1.78	@ 25 °C.
Bulk density	1.110 g/l 1000 kg/m ³	
Liquid Density	No information available	No information available
Relative vapour density		Not applicable.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	Not considered to be explosive.	
Oxidising properties	Does not meet the criteria for classification as oxidising	

9.2. Other information

Molecular weight 132.1395 g/mol
Evaporation rate < 0.01 @ 20 °C

SECTION 10: Stability and reactivity**10.1. Reactivity**

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stability Stable under recommended storage conditions. Stable below 200°C / 392°F.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product:. Strong oxidising agents.

10.4. Conditions to avoid

Conditions to avoid Avoid generation of dust. Humidity. Protect from moisture. Keep away from heat, sparks and open flame.

10.5. Incompatible materials

Incompatible materials Alkali. Nitrates. Nitrites. Oxidising agents. Alkali metals.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx). Oxides of sulphur. Ammonia. Amines.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

Eye contact Solid particles trapped behind the eyelid may cause abrasive damage,.

Skin contact Non-irritating during normal use.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics**Symptoms****Acute toxicity**

Numerical measures of toxicity**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
AMMONIUM SULPHATE	4250 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 3.5 mg/L/4h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data the classification criteria are not met.

AMMONIUM SULPHATE (7783-20-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal			non-irritant

Serious eye damage/eye irritation Based on available data the classification criteria are not met.

AMMONIUM SULPHATE (7783-20-2)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	eye			non-irritant

Respiratory or skin sensitisation Based on available data the classification criteria are not met.

AMMONIUM SULPHATE (7783-20-2)

Method	Species	Exposure route	Results
	Guinea pig	Dermal	Not a skin sensitiser

Germ cell mutagenicity Based on available data the classification criteria are not met.

Component Information

AMMONIUM SULPHATE (7783-20-2)

Method	Species	Results
OECD Test No. 471: Bacterial Reverse Mutation Test	Ames Test	Negative
OECD Test No. 473: In vitro Mammalian Chromosome Aberration Test		Negative
OECD Test No. 476: In Vitro Mammalian Cell Gene Mutation Tests using the Hprt and xprt genes	CHO cells	Negative

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity Based on available data the classification criteria are not met.

STOT - single exposure Based on available data the classification criteria are not met.

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard Based on available data the classification criteria are not met.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

AMMONIUM SULPHATE (7783-20-2)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Oncorhynchus mykiss (rainbow trout)	LC50	53 mg/L	96 hours	
	Ceriodaphnia sp Ceriodaphnia acanthina	EC50	121.7 mg/L	48 hours	
	Chlorella vulgaris	EC50	2700 mg/L	18 days	
OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)	activated sludge	EC20	1050 mg/L	0.5 hours	
Chronic toxicity	Hyalella azteca	EC10	3.12 mg/L	70 days	
	Eisenia foetida	LC50	201 mg/kg	14 days	
	Protopium williamsoni	LC50	57.2 mg/L	96 hours	
	Daphnia magna	EC50	169 mg/L	48 hours	
	Lepomis macrochirus	EC10	5.29 mg/L	30 days	
	Chlorella vulgaris	EC50	1605 mg/L	5 days	

12.2. Persistence and degradability

Persistence and degradability Inorganic substance.

AMMONIUM SULPHATE (7783-20-2)

Method	Exposure time	Value	Results
			Inorganic.

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Component Information

Chemical name	Partition coefficient
AMMONIUM SULPHATE	-5.1

12.4. Mobility in soil

Mobility in soil Not expected to adsorb on soil.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
AMMONIUM SULPHATE	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

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

National regulations

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

This product does not contain substances subject to restriction (UK REACH - Annex XVII).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA	- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL	- Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS	- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS	- Japan Existing and New Chemical Substances
IECSC	- China Inventory of Existing Chemical Substances
KECL	- Korean Existing and Evaluated Chemical Substances
PICCS	- Philippines Inventory of Chemicals and Chemical Substances
AIIC	- Australian Inventory of Industrial Chemicals
NZIoC	- New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report

A Chemical Safety Assessment has been carried out for this substance Although the Chemical Safety Assessment has been carried out, no Exposure Scenarios are required in

this sheet because the substance is not classified as hazardous.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note **SDS sections updated 1 3 4 5 6 7 8 9 10 11 12 14 15 16**

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Prepared By Lisa Bland

Supersedes date 29-Oct-2025

Revision date 21-Apr-2026

This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet