

# SAFETY DATA SHEET

In accordance with 1907/2006 annex II and 1272/2008  
(All references to EU regulations and directives are abbreviated into only the numeric term)  
Issued 2023-02-01  
Version number 1.0



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

### 1.1. Product identifier

Trade name Ammonium sulfate

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

Identified uses Plant nutrition  
Fertilizers

### 1.3. Details of the supplier of the safety data sheet

Company EasyMining Sweden AB  
Ultunaallén 2A  
756 51 Uppsala  
Sweden  
Telephone 0709275661  
E-mail info@easymining.se

### 1.4. Emergency telephone number

Phone number for emergencies: 999 or 112. The numbers are available 24/7.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Upon assessment, this mixture is not classified as hazardous according to 1272/2008

### 2.2. Label elements

Hazard pictogram Not applicable  
Signal word Not applicable  
Hazard statement Not applicable

### 2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
<b>AMMONIUM SULFATE</b>		
CAS No: 7783-20-2 EC No: 231-984-1 REACH: 01-2119455044-46		10 - 40 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Generally

In case of concern, or if symptoms persist, call a doctor/physician.

#### Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

#### Upon eye contact

Remove contact lenses immediately if possible.

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor.

#### Upon skin contact

Remove contaminated clothes.

Wash the skin with soap and water.

If symptoms occur, contact a physician.

#### Upon ingestion

Rinse nose, mouth and throat with water.

Drink a couple of glasses of water immediately.

Get medical attention if you feel unwell.

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

No further relevant information available.

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

Symptomatic treatment.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Extinguish with materials intended for the surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

In case of fire, substances hazardous to health, or substances harmful in other respects, may be dispersed.

### 5.3. Advice for firefighters

Protective measures should be taken regarding other material at the site of the fire.

In case of fire use proper breathing apparatus.

Wear full protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Use recommended safety equipment, see section 8.

Avoid inhalation and exposure to skin and eyes.

Ensure good ventilation.

### 6.2. Environmental precautions

Avoid release to drains, soil or watercourses.

### 6.3. Methods and material for containment and cleaning up

Small spills can be wiped up with a cloth or similar. Then flush the spill site with water. Larger spills should first be covered with sand or earth and then be collected. Collected material should be disposed according to Section 13.

### 6.4. Reference to other sections

See section 8 and 13 for personal protection equipment and disposal considerations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Store this product separately from food items and keep it out of the reach of children and pets.

The usual precautions for handling chemicals should be observed.

Avoid spillage and contact with eyes and skin.

Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.

Do not eat, drink or smoke in premises where this product is handled.

Wash your hands after using the product.

Remove contaminated clothing.

Wash contaminated clothing before reuse.

Use recommended safety equipment, see section 8.

Implement appropriate engineering controls if necessary, see Section 8.

### 7.2. Conditions for safe storage, including any incompatibilities

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.

This product should be stored well out of reach of young children and kept safely apart from products intended for consumption.

Always use sealed and visibly labeled packages.

Store in dry and cool area.

Store in a well-ventilated space.

### 7.3. Specific end use(s)

See identified uses in Section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. National limit values

All ingredients (cf. Section 3) lack occupational exposure limit values.

#### DNEL

#### AMMONIUM SULFATE

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	1.67 mg/m <sup>3</sup>
Worker	Chronic Systemic	Dermal	42.67 mg/kg bw/d
Worker	Chronic Systemic	Inhalation	11.17 mg/m <sup>3</sup>
Consumer	Chronic Local	Inhalation	20 mg/m <sup>3</sup>
Consumer	Chronic Systemic	Oral	6.4 mg/kg bw/d
Consumer	Chronic Systemic	Dermal	12.8 mg/kg bw/d

#### PNEC

#### AMMONIUM SULFATE

Environmental protection target	PNEC value
Fresh water	0.312 mg/l
Freshwater sediments	0.063 mg/kg
Marine water	0.0312 mg/l
Food chain	0.53 mg/l
Microorganisms in sewage treatment	16.18 mg/l
Soil (agricultural)	62.6 mg/kg

## 8.2. Exposure controls

The risks posed by the product or its constituents must be considered in the task specific risk assessment, in accordance with current working environment legislation. The risk assessment should be reviewed regularly and updated if necessary.

### 8.2.1. Appropriate engineering controls

The ventilation in the workplace must ensure an air quality that meets the requirements of the current working environment legislation. Local exhaust ventilation should be used to remove airborne contaminants at the source.

### Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

### Skin protection

Use suitable protective clothing.

Use protective gloves fulfilling the standard EN374 if there is a risk of direct contact.

During continuous contact use gloves with a minimum breakthrough time of at least 240 minutes, preferably over 480 minutes.

The most suitable protective glove should be chosen in consultation with the glove supplier, taking into account the risk assessment for the specific task and the properties of the chemicals involved. Note that the breakthrough time of the material is affected by the duration of the exposure, temperature conditions, abrasion, etcetera.

Based on the chemical properties of the product, the following glove materials are recommended (EN 374):.

– Nitrile rubber.

### Respiratory protection

Respiratory protective equipment is not normally required when working with this product, given that adequate ventilation is provided.

The most appropriate respiratory protective equipment should be decided in consultation with the appointed safety representative, taking into account the risk assessment for the specific task.

### 8.2.3. Environmental exposure controls

Work with the product should take place in such a way that the product does not get into soils and waterways.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

(a) Physical state	liquid
	Form: liquid
(b) Colour	brownish
(c) Odour	odourless or almost odourless
(d) Melting point/freezing point	-6 °C
(e) Boiling point or initial boiling point and boiling range	≈105 °C
(f) Flammability	Not indicated
(g) Lower and upper explosion limit	Not indicated
(h) Flash point	Not indicated
(i) Auto-ignition temperature	Not indicated
(j) Decomposition temperature	Not indicated
(k) pH	When supplied, pH is: 5 - 8
(l) Kinematic viscosity	Not indicated
(m) Solubility	Solubility in water: Unlimited solubility
(n) Partition coefficient n-octanol/water (log value)	Not indicated
(o) Vapour pressure	Not indicated
(p) Density and/or relative density	1.04 - 1.23
(q) Relative vapour density	Not indicated
(r) Particle characteristics	Not indicated

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Not indicated

#### 9.2.2. Other safety characteristics

Not indicated

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

### 10.2. Chemical stability

The product is stable at normal storage and handling conditions.

### 10.3. Possibility of hazardous reactions

No hazardous reactions known.

### 10.4. Conditions to avoid

Avoid sources of ignition and excessive temperatures.

Protect from direct sunlight.

### 10.5. Incompatible materials

Chlorate.

Nitrates.

Zinc.

Copper.

Oxidizing substances.

### 10.6. Hazardous decomposition products

None under normal conditions.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on possible health hazards are based on experience and / or toxicological properties of several components in the product.

#### Acute toxicity

The product is not classified as acutely toxic.

#### AMMONIUM SULFATE

LD50 Mouse 24h: 640 mg/kg Orally

LD50 rat 24h: 2840 mg/kg Orally

#### Skin corrosion/irritation

The product is not classified for skin corrosion/irritation.

#### Serious eye damage/irritation

The product is not classified for serious eye damage/eye irritation.

#### Respiratory or skin sensitisation

The product is not classified as sensitising.

#### Germ cell mutagenicity

The product is not classified as mutagen.

#### Carcinogenicity

The product is not classified as carcinogenic.

#### Reproductive toxicity

The product is not classified as a reproductive toxicant.

#### STOT-single exposure

The product is not classified for specific organ toxicity after single exposure.

#### STOT-repeated exposure

The product is not classified for specific organ toxicity after repeated exposure.

#### Aspiration hazard

The product is not classified as being toxic for aspiration.

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No information is available.

#### 11.2.2. Other information

Not indicated.

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not to be labelled as an environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.

Prevent release on land, in water and drains.

### AMMONIUM SULFATE

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 53 mg/l

### 12.2. Persistence and degradability

There is no information regarding persistence or degradability.

### 12.3. Bioaccumulative potential

There is no information regarding bioaccumulation.

### 12.4. Mobility in soil

Information about mobility in nature is not available.

### 12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6. Endocrine disrupting properties

No information is available.

### 12.7. Other adverse effects

No known effects or hazards.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Waste handling of the product

Avoid discharge into sewers.

The product is not classified as hazardous waste.

Empty, rinsed packaging is sent for recycling where practicable.

See directive 2008/98/EC on waste. Observe national or regional provisions on waste management.

## SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

### 14.1. UN number or ID number

Not classified as dangerous goods

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Not applicable

### 14.6. Special precautions for user

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

### 14.8 Other transport information

Not applicable

## SECTION 15: Regulatory information

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

Not indicated.

### 15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

## SECTION 16: Other information

### 16a. Indication of where changes have been made to the previous version of the safety data sheet

#### Revisions of this document

This is the first version

### 16b. Legend to abbreviations and acronyms used in the safety data sheet

#### Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

### 16c. Key literature references and sources for data

#### Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2023-02-01.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

#### Full texts for Regulations mentioned in this Safety Data Sheet

- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- 2008/98/EC DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives

### 16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

### 16e. List of relevant hazard statements and/or precautionary statements

### 16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

#### Warning for misuse

Not indicated.

#### Other relevant information

Not indicated

#### Editorial information



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