

# EC safety data sheet

Ammonium sulphate  
AM-AG005

Status: 14.03.2012

1.3.0, issued: 14.03.2012

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

### 1.1 Product identifier

Trade name

**Ammonium sulphate**

Identification numbers

CAS no. 7783-20-2  
EC no. 231-984-1

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

Relevant identified uses of the substance or mixture

Fertilizer  
Intermediate product  
laboratory chemicals  
Flame retardant  
pH-regulating agent  
Use in pharmacy, cosmetics, insecticides, herbicides and fungicides

Uses advised against

None known

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

Address

Ameropa AG  
Rebgasse 108  
CH-4102 Binningen

Telephone no. +41 61 301 2711  
Fax no. +41 61 302 9863

Advice on Safety Data Sheet

info@umco.de

### 1.4 Emergency telephone number

For medical advice (in German and English):  
+49 (0)551 192 40 (Giftinformationszentrum Nord)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification information

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).  
This product does not meet the classification and labelling criteria given in the Dangerous Preparations Directive 67/548/EC (DSD)

### 2.2 Label elements

Not relevant

### 2.3 Other hazards

No data available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical characterization

Substance name ammonium-sulphate

Identification numbers

CAS no. 7783-20-2  
EC no. 231-984-1

### 3.2 Mixtures

Not applicable. The product is not a mixture.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

#### After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

#### After skin contact

Wash off immediately with soap and water.

#### After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

#### After ingestion

Rinse out mouth and give plenty of water to drink. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

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

No data available.

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

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

#### Unsuitable extinguishing media

No data available.

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

In the event of fire, the following can be released: Nitrogen oxides (NO<sub>x</sub>); Sulphur oxides

### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid dust formation.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

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

Take up mechanically. Send in suitable containers for recovery or disposal.

### 6.4 Reference to other sections

No data available.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Avoid the formation and deposition of dust.

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## General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not inhale dust. Remove soiled or soaked clothing immediately.

## Advice on protection against fire and explosion

Keep away from sources of heat and ignition.

## 7.2 Conditions for safe storage, including any incompatibilities

### Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

### Requirements for storage rooms and vessels

Store product in closed containers.

### Advice on storage assembly

Do not store together with: Chlorates; Nitrates; Alkalies

## 7.3 Specific end use(s)

No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### DNEL und PNEC values

##### DNEL values (worker)

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	ammonium-sulphate			7783-20-2 231-984-1
	dermal	Long term (chronic)	systemic	42,667 mg/kg/day
	inhalational	Long term (chronic)	systemic	11,167 mg/m <sup>3</sup>

##### DNEL value (consumer)

No	Substance name			CAS / EC no
	Route of exposure	Exposure time	Effect	Value
1	ammonium-sulphate			7783-20-2 231-984-1
	oral	Long term (chronic)	systemic	6,4 mg/kg/day
	dermal	Long term (chronic)	systemic	12,8 mg/kg/day
	inhalational	Long term (chronic)	systemic	1,667 mg/m <sup>3</sup>

##### PNEC values

No	Substance name			CAS / EC no
	ecological compartment	Type		Value
1	ammonium-sulphate			7783-20-2 231-984-1
	water	fresh water		0,312 mg/l
	water	marine water		0,0312 mg/l
	soil	-		62,6 mg/kg
	sewage treatment plant	-		16,18 mg/l

### 8.2 Exposure controls

#### Appropriate engineering controls

No data available.

#### Personal protective equipment

##### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. Dust mask

##### Eye / face protection

Safety glasses with side protection shield (EN 166)

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## Hand protection

Protective gloves (EN 374); Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

## Other

Normal chemical work clothing.

## Environmental exposure controls

No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form/Colour</b>	
solid	
white	
<b>Odour</b>	
odourless	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point / melting range</b>	
Value	> 280 °C
Source	CSR

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<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
No data available	
<b>Auto-ignition temperature</b>	
No data available	
<b>Oxidising properties</b>	
No data available	
<b>Explosive properties</b>	
No data available	
<b>Flammability (solid, gas)</b>	
No data available	
<b>Lower flammability or explosive limits</b>	
No data available	
<b>Upper flammability or explosive limits</b>	
No data available	
<b>Vapour pressure</b>	
No data available	
<b>Vapour density</b>	
No data available	
<b>Evaporation rate</b>	
No data available	
<b>Relative density</b>	
No data available	
<b>Density</b>	
Value	1,77
Reference temperature	25 °C
Source	CSR
Remarks	Relative density
<b>Solubility in water</b>	
Value	767 g/l
Reference temperature	25 °C
Source	CSR
<b>Solubility(ies)</b>	
No data available	
<b>Partition coefficient: n-octanol/water</b>	
No data available	
<b>Viscosity</b>	
No data available	

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

No data available.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

Heat

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## 10.5 Incompatible materials

Chlorates; Nitrates; Alkalies

## 10.6 Hazardous decomposition products

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute oral toxicity	
LD50	4250 mg/kg
Species	rat
Method	OECD 401
Source	CSR

  

Acute dermal toxicity	
LD50	> 2000 mg/kg
Species	rat
Source	CSR

  

Acute inhalational toxicity	
LC50	1000 mg/m <sup>3</sup>
Source	CSR

  

Skin corrosion/irritation	
Species	rabbit
Method	OECD 404
Source	CSR
Evaluation	non-irritant

  

Serious eye damage/irritation	
Species	rabbit
Method	BASF-Test
Source	CSR
Evaluation	non-irritant

  

Respiratory or skin sensitisation	
Route of exposure	Skin
Species	guinea pig
Source	CSR
Evaluation	non-sensitizing

  

Germ cell mutagenicity	
Type of examination	Bacterial Reverse Mutation Test
Method	OECD 471
Source	CSR
Evaluation	negative

  

Reproduction toxicity	
Route of exposure	900
	1500 mg/kg/d
Type of examination	NOAEL
Method	OECD 422
Source	CSR

  

Carcinogenicity	
Route of exposure	oral
	284 mg/kg/d
Type of examination	NOAEL
Species	rat
Method	OECD 453
Source	CSR

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## STOT-single exposure

No data available

## STOT-repeated exposure

No data available

## Aspiration hazard

No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Fish toxicity

LC50	53	mg/l
Duration of exposure	96	h
Species	Oncorhynchus mykiss	
Source	CSR	

#### Daphnia toxicity

EC50	169	mg/l
Duration of exposure	48	h
Species	Daphnia magna	
Source	CSR	

#### Algae toxicity

EC50	2700	mg/l
Duration of exposure	18	d
Species	Chlorella vulgaris	
Source	CSR	

#### Bacteria toxicity

No data available

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

No data available.

### 12.5 Results of PBT and vPvB assessment

No data available.

### 12.6 Other adverse effects

No data available.

### 12.7 Other information

#### Other information

Do not discharge into the drains or waters and do not store on public depositories.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

#### Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

### 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

### 14.4 Other information

No data available.

### 14.6 Special precautions for user

No data available.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

## SECTION 15: Regulatory information

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

#### EU regulations

#### **Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances**

Remarks

Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

### 15.2 Chemical safety assessment

No data available.

## SECTION 16: Other information

#### **Sources of key data used to compile the data sheet:**

EC Directive 67/548/EC resp. 99/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EC

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

#### **Department issuing safety data sheet**

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This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.