


<p>Page 1 of 4</p> <p>Print Date 26.11.2018</p>	<p><b>Material Safety Data Sheet</b> according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Ammoniumsulfat</p>	 <p>Revision Date 26.11.2018</p>
-------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

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

- **Informations to product No. 2079**
- **Product name:**

**Ammoniumsulfat**  
Ammonii sulfas  
Ammonium sulfate

- **Supplier of the Product / responsible Company:**

Caesar & Loretz GmbH  
Herderstr. 31  
40721 Hilden  
Tel.: 02103/4994-0  
Fax: 02103/32360  
e-mail: info@caelo.de

- **Emergency telephone:**

Giftinformationszentrum Mainz  
Langenbeckstr. 1, 55131 Mainz  
Tel.: 06131/19240

- **Relevant identified uses of the substance or mixture and uses advised against:**

No further relevant information available.

- **Application of the substance / mixture:**

Ingredient for pharmaceutical drugs or active pharmaceutical ingredient.

## 2 Hazards identification

- **Hazards identification:** The substance is not classified as dangerous according to European Union legislation.

## 3 Composition / information on ingredients

- **Chemical characterization:**

**CAS-No. Substance name**

7783-20-2 Ammonium sulphate

- **Identification number(s)**


- **EINECS-No.:** 231-984-1

- **REACH-Reg.-No.:** 01-2119455044-46-0000

- **INCI-Name:** Ammonium Sulfate

## 4 First aid measures

- **after inhalation:** Fresh air
- **after skin contact:** Wash away with water. Remove contaminated clothing.
- **after eye contact:** Rinse out with plenty of water with the eyelid wide open.
- **after swallowing:** Drink water. Induce vomiting. Seek medical advice.

<p>Page 2 of 4</p> <p>Print Date 26.11.2018</p>	<p><b>Material Safety Data Sheet</b> according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Ammoniumsulfat</p>	 <p>Revision Date 26.11.2018</p>
-------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

## 5 Fire-fighting measures

- **Suitable extinguishing media:** All regular extinguishing media can be used. Select fire fighting measures suitable to surrounding environment.
- **Specific hazards during fire fighting:** Not combustible. Fire-retardant effect. In case of fire dangerous vapours/gases can be generated: Ammonia, Nitrogen oxides, sulphur oxides.
- **Special protective equipment for fire-fighters:** Suitable protective clothes and respiratory protection.
- **Additional information:** Prevent fire extinguishing water from contaminating surface water, the ground water system or soil. Residues must be deposited according to local regulations.

## 6 Accidental release measures

- **Personal protective measures:** Avoid dust formation and contact with substance.
- **Environmental protective measures:** Prevent from entering into drains.
- **Methods for cleaning:** Take up dry. Disposal according to Chapter 13 of this MSDS. Clean up with water.

## 7 Handling and storage


- **Handling:** No special requirements.
- **Advice on safe handling:** No special measures required.
- **Informations to fire or explosion protection:** No special measures required.
- **Storage:**
- **Requirements for storage areas and containers:** Tightly closed. Store at a dry place. At room temperature ( +15°C to +25°C ).
- **Advices on common storage:** Not required.

## 8 Exposure controls / personal protective equipment

- **Personal protective equipment:**
- **General protective and hygiene measures:** The usual precaution measures during handling of chemicals are to observe.
- **Respiratory protection:** Dust protection mask.
- **Hand protection:** Gloves of latex or rubber
- **Eye protection:** Safety glasses

## 9 Physical and chemical properties

- **Form:** solid
- **Colour:** white
- **Odour:** odourless
- **Melting point / melting range:** 280 °C
- **Boiling point / boiling range:** not determined
- **Flammability (solid, vapours):** The product is not flammable.
- **Density:** (20 °C) 1,77 g/cm<sup>3</sup>
- **Bulk density:** ca. 850 kg/m<sup>3</sup>
- **Solubility in / Miscibility with**

<p>Page 3 of 4</p> <p>Print Date 26.11.2018</p>	<p><b>Material Safety Data Sheet</b>  according to Regulation (EC) No.  1907/2006 (REACH)</p> <p>Ammoniumsulfat</p>	 <p>Revision Date 26.11.2018</p>
-------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

- **Water:** (20 °C) 754 g/l
- **pH-range:** (100 g/l) ca. 5

## 10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:** Avoid strong heating. Thermal decomposition above 280 °C
- **Materials to avoid:** Alkali metals, strong oxidants, alkaline substances.
- **Hazardous reactions:** Reaction with alkaline substances releases ammonia..
- **Hazardous decomposition products:** Ammonia, sulphur oxides.

## 11 Toxicological information

- **Acute toxicity:** Systemic effects: After swallowing of big quantities: Illness, vomiting, Diarrhea, drop in blood pressure, Collapse, central nervous disorder.  
Oral: LD50: 4250 mg/kg (rat) OECD 401
- **Primary irritant effect:**
- **on eyes:** Irritations.
- **Additional toxicological informations:** In case of appropriate handling and usage the product does not cause harmful effects.

## 12 Ecological information


- **Ecotoxicological effects:**  
Fish: LC50 Oncorhynchus mykiss: 53 mg/l; 96 h  
Daphnia: EC50 Ceriodaphnia: 121,7 mg/l; 48 h  
Algae: EC50 Chlorella vulgaris: 2.700 mg/l; 18 h
- **Information about elimination (persistence and degradability):**  
Fertilizing effect possible.
- **Additional information:**  
For sulphates generally: Biological effects: Fishes: toxic above 7g/l; Bacteria toxic above > 2,5 g/l.
- **General advices:** Prevent from entering sewage water or drainage ditch undiluted or unneutralized.
- **Water hazard class:** 1 (VwVwS): slightly hazardous for water.

## 13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal according to local regulations as pharmaceutical waste.
- **Empty contaminated packaging:**
- **Recommendation:** Disposal according to the local regulations.

## 14 Transport informations

- **Land transport according to ADR:**  
Not classified as dangerous in the meaning of transport regulations.

Page 4 of 4  Print Date 26.11.2018	<b>Material Safety Data Sheet</b> according to Regulation (EC) No. 1907/2006 (REACH)  Ammoniumsulfat	 Revision Date 26.11.2018
------------------------------------------	------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------

## 15 Regulatory information

· **Labelling according to actual legislation (GHS, Globally Harmonized System of Classification and Labelling of Chemicals):**

The product does not need to be labelled according to GHS-regulations.

· **National regulations (Germany):**

· **Water hazard class:** see chapter 12

· **Storage class TRGS 510:** 13

## 16 Other Information

The information provided in this MSDS is correct to the best of our knowledge at the date of edition.