


<p>Page 1 of 5</p> <p>Print Date 27.11.2018</p>	<p><b>Material Safety Data Sheet</b> according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Aluminiumchlorid-Hexahydrat, cryst.</p>	 <p>Revision Date 27.11.2018</p>
---	--	---

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

· **Informations to product No. 2069**

· **Product name:**

### **Aluminiumchlorid-Hexahydrat, cryst.**

Aluminiumchlorid hexahydratum

Aluminium chloride hexahydrate

· **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

· **GHS-Labeling Elements:**



· **Signal word:** Warning

· **H-Phrases:**

H315 Causes skin irritation.

H319 Causes serious eye irritation

· **P-Phrases:**

P281 Use personal protective equipment as required.

P302 IF ON SKIN:

P352 Wash with plenty of soap and water.


P305 IF IN EYES:

P351 Rinse cautiously with water for several minutes.

P313 Get medical advice/attention.

**Skin Irrit. 2**

**Eye Irrit. 2**

<p>Page 2 of 5</p> <p>Print Date 27.11.2018</p>	<p><b>Material Safety Data Sheet</b> according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Aluminiumchlorid-Hexahydrat, cryst.</p>	 <p>Revision Date 27.11.2018</p>
---	--	---

### 3 Composition / information on ingredients

· **Chemical characterization:**

**CAS-No. Substance name**

7784-13-6 Aluminium chloride hexahydrate

- **EINECS-No.:** 231-208-1
- **REACH Reg. No.:** 01-2119459371-39
- **INCI-Name:** Aluminium Chloride

### 4 First aid measures

- **after inhalation:** Fresh air.
- **after skin contact:** Take off contaminated clothes and shoes, wash immediately with plenty of water and soap.
- **After eye contact:** Rinse out with plenty of water with the eyelid wide open. Call in ophthalmologist.
- **after swallowing:** Drink water. Induce vomiting. Seek medical advice.

### 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. In case of fire dangerous vapours/gases can be generated: Hydrogen chloride.
- **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 contact with substance. Avoid inhalation of dusts.
- **Environmental protective measures:** Prevent from entering into surface water, the ground water system or soil.
- **Methods for cleaning:** Take up dry. Disposal according to Chapter 13 of this MSDS. Clean up with water. Avoid dust formation.

### 7 Handling and storage

- **Handling:**
- **Informations to fire or explosion protection:** No special measures required.
- **Storage:**
- **Requirements for storage areas and containers:** Tightly closed. Store at a dry place.
- **Advices on common storage:** Not required.

<p>Page 3 of 5</p> <p>Print Date 27.11.2018</p>	<p><b>Material Safety Data Sheet</b>  according to Regulation (EC) No.  1907/2006 (REACH)</p> <p>Aluminiumchlorid-Hexahydrat, cryst.</p>	 <p>Revision Date 27.11.2018</p>
---	--	---

## 8 Exposure controls / personal protective equipment

- **Personal protective equipment:**
- **General protective and hygiene measures:**  
Keep away from food, beverages and animal food.  
Wash hands before breaks and after work.  
Avoid contact with eyes and skin.  
Change contaminated clothing.
- **Respiratory protection:** If dust is generated: Dust protection mask.
- **Hand protection:** Protection gloves of latex or rubber.
- **Eye protection:** Safety glasses.

## 9 Physical and chemical properties


- **Form:** solid
- **Colour:** colourless
- **Odour:** odourless
- **Melting point / melting range:** ca. 100 °C
- **Boiling point / boiling range:** not determined
- **Flammability (solid, vapours):** The product is not flammable.
- **Density:** (20 °C) 2,40 g/cm<sup>3</sup>
- **Bulk density:** ca. 700 kg/m<sup>3</sup>
- **Solubility in / Miscibility with**
- **Water:** (20 °C) 477 g/l
- **pH-range:** (50 g/l, 20 °C) 2,5 – 3,5

## 10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:** No decomposition during appropriate use.
- **Hazardous decomposition products:** Hydrogen chloride

## 11 Toxicological information

- **Acute toxicity:**  
**LD50/LC50:** RTECS:  
**CAS# 7784-13-6:** Oral, Mouse: LD50 = 1990 mg/kg;  
LD50 = 3311 mg/kg
- **Carcinogenicity:** not classified as cancerogene.
- **Primary irritant effect:**
- **on skin:** Irritant effect on skin and mucous membranes.
- **on eyes:** Irritant effect.
- **on respiratory organs:** Irritant effect.

<p>Page 4 of 5</p> <p>Print Date 27.11.2018</p>	<p><b>Material Safety Data Sheet</b> according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Aluminiumchlorid-Hexahydrat, cryst.</p>	 <p>Revision Date 27.11.2018</p>
---	--	---

## 12 Ecological information

- **Aquatic toxicity:**

Fish LC50: 27,1 mg/l, 96h

Daphnia LC50: 27,3 mg/l, 48h

- **General remark:** Toxic for water organisms: Harmful effect due to pH-shifting.

- **Water hazard class:** 1 (VwVwS): slightly hazardous for water.

## 13 Disposal considerations

- **Product:**

- **Recommendation:** Disposal according to local regulations as pharmaceutical waste or inorganic laboratory chemicals.

- **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.

## 15 Regulatory information

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

The product is classified and labelled according to GHS-regulations.

- **Hazard symbols:** GHS07

- **Signal word:** Warning

- **H-Phrases:**

H315 Causes skin irritation.

H319 Causes serious eye irritation

- **P-Phrases:**

P281 Use personal protective equipment as required.

P302 IF ON SKIN:

P352 Wash with plenty of soap and water.

P305 IF IN EYES:

P351 Rinse cautiously with water for several minutes.

P313 Get medical advice/attention.

- **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.

<p>Page 5 of 5</p> <p>Print Date 27.11.2018</p>	<p><b>Material Safety Data Sheet</b> according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Aluminiumchlorid-Hexahydrat, cryst.</p>	 <p>Revision Date 27.11.2018</p>
---	--	---

· **Reason for last revision:** Adjustment to regulation (EC) 1907/2006 (REACH) and GHS-labelling system.