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

· **Informations to product No. 2738**

· **Product name:**

Zinksulfat-Heptahydrat

Zinci sulfas heptahydricus, Zincum sulfuricum cryst.

Zinc sulfate heptahydrate

· **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:** Danger

· **H-Phrases:**

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H410 Very toxic to aquatic life with long lasting effects.

· **P-Phrases:**

P273 Avoid release to the environment.

P281 Use personal protective equipment as required.

P301 IF SWALLOWED:


P330 rinse mouth.

P305 IF IN EYES:

P351 Rinse cautiously with water for several minutes.

P308 IF exposed or concerned:

P313 Get medical advice/attention.

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Acute Tox. 4
Aquatic Acute 1
Aquatic Chronic. 1
Eye Dam. 1

3 Composition / information on ingredients

- **Chemical characterization:**
CAS-No. Substance name
7446-20-0 Zinc sulfate heptahydrate
- **EINECS-No.:** 231-793-3
- **Index-No.:** 030-006-00-9
- **REACH Reg. No.:** 01-2119474684-27-0000
- **INCI-Name:** Zinc Sulfate

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. If irritation continues, 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: 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 substance contact. Do not inhale dust.
- **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:**
- **Advice on safe handling:** If dust is generated, exhaustion required.

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- **Storage:**
- **Requirements for storage areas and containers:** Tightly closed. Store at a dry place. At room temperature (+15°C to +25°C).

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.
- **Respiratory protection:** Dust protection mask.
- **Hand protection:** Protection gloves of rubber.
- **Eye protection:** Safety glasses.

9 Physical and chemical properties

- **Form:** solid
- **Colour:** white
- **Odour:** odourless
- **Melting point / melting range:** ca.100 °C
- **Density:** (20 °C) 1,957 g/cm³
- **Bulk density:** 1100 kg/m³
- **Solubility in / Miscibility with**
- **Water:** (20 °C) 965 g/l
- **pH-range:** (50 g/l, 20 °C) 4,4 - 5,6

10 Stability and reactivity


- **Thermal decomposition / conditions to avoid:** Strong heating.
- **Hazardous decomposition products:** Sulphur oxides and toxic metal oxide fume.
- **Additional information:** Release of crystal water after heating.

11 Toxicological information

- **Acute toxicity:**
LD50 (rat, oral): 2200 mg/kg
LD50 (mouse, oral): 2150 mg/kg
- **Effect on respiratory organs:** Inhalation can cause edema in respiratory tract.
- **after swallowing:** Irritations of mucous membranes in Mouth, Throat, Esophagus and Gastrointestinal tract, pains, Vomiting, Diarrhea.

12 Ecological information

- **Aquatic toxicity:**
LC50 Oncorhynchus mykiss: 1,9 mg/l/96h
IC50 Scenedesmus quadricauda: 0,93 mg/l/120h
Biological effects: Toxic for water organisms. Baktericide Effect. Danger for drinking water.
- **Water hazard class:** 3 (VwVwS): very hazardous for water.

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13 Disposal considerations

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

14 Transport informations

- **Land transport according to ADR:**
- **Proper shipping name:** Umweltgefährdender, solider Stoff, n.o.s., Zinc sulphate
- **Class:** 9
- **UN-number:** 3077
- **Packing group:** III
- **Classification code:** M7
- **Limited quantities (Table 3.4.6. ADR):** 5 kg
- **Hazard classification number:** 90
- **Special provisions (Chapter 3.3 ADR):** 274
- **Additional informations for sea transport IMDG:**
- **EMS-No.:** F-A, S-F
- **Properties:** m.p.

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:** GHS05, GHS07, GHS09

- **Signal word:** Danger

- **H-Phrases:**

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- **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:** 8B

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16 Other Information

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

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