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| Page 1 of 4<br><br>Print Date 22.11.2018 | <b>Material Safety Data Sheet</b><br>according to Regulation (EC) No.<br>1907/2006 (REACH)<br><br>Zinkoxid, API | <br>Revision Date 22.11.2018 |
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## 1 Identification of the substance/mixture and of the company/undertaking

- Informations to product No. 2735
- Product name:

**Zinkoxid, API**  
Zinci oxidum  
Zinc oxide

- 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



- Signal word: Warning

- H-Phrases:

H410 Very toxic to aquatic life with long lasting effects

- P-Phrases:

P273 Avoid release to the environment

**Aquatic Acute 1**

**Aquatic Chronic 1**


## 3 Composition / information on ingredients

- Chemical characterization:

**CAS-No. Substance name**

1314-13-2 Zinc oxide

- EINECS-No.: 215-222-5

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- **Index-No.:** 030-013-00-7
- **REACH Reg.-No.:** 01-2119463881-32-0000
- **INCI-Name:** Zinc Oxide

#### 4 First aid measures

- **after inhalation:** Fresh air. If irritations continue, seek medical advice.
- **after skin contact:** Wash away with water and soap.
- **after eye contact:** Rinse out with plenty of water with the eyelid wide open.
- **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:** None (Not combustible).
- **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. Ensure good ventilation / exhaustion at the workplace. Avoid formation of dust. Avoid inhalation of dust. Avoid contact with eyes.
- **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


##### Components with limit values that require monitoring at the workplace:

1314-13-2 Zinc oxide (100,0%)

MAK: 5 F mg/m<sup>3</sup>

##### · Personal protective equipment:

- **General protective and hygiene measures:** The usual precaution measures during handling of chemicals are to observe.
- **Respiratory protection:** Dust protection mask required if dust is released..
- **Hand protection:** Protection gloves of rubber or latex
- **Eye protection:** Safety glasses

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## 9 Physical and chemical properties

- **Form:** solid
- **Colour:** white, in heat pale yellow
- **Odour:** odourless
- **Melting point / melting range:** 1975 °C
- **Boiling point / boiling range:** 1800 °C Sublimation
- **Flash point:** not determined
- **Density:** (20 °C) 5,66 g/cm<sup>3</sup>
- **Bulk density:** ca.300 - 500 kg/m<sup>3</sup>
- **Solubility in / Miscibility with**
- **Water:** Nearly not soluble (<0,002g/l). In diluted acids soluble forming Zinc salts, in strong basic solutions soluble forming zincates.
- **pH-range:** (Suspension 50 g/l, 20 °C) 7 - 8

## 10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:** No decomposition during appropriate use.
- **Hazardous reactions:** No hazardous reactions known.
- **Hazardous decomposition products:** none

## 11 Toxicological information


- **Acute toxicity:**  
LD50 (rat, oral): > 10000 mg/kg  
LD50 (rat, inhal.): > 5,7 mg/l
- **Primary irritant effect:** Adstringent properties.  
On skin: Slightly irritant  
On eyes: Slightly irritant
- **Sensitization:** Not sensitizing
- **after swallowing:** (big quantities): Irritations of mucous membranes, Gastrointestinal disorder.
- **Additional toxicological informations:** In case of appropriate handling and usage the product does not cause harmful effects.

## 12 Ecological information

- **Aquatic Toxicity:** EC 50/72h: 0,17mg/l (selenastrum capricornutum)  
After solution and formation of zinc salts harmful effect on water organisms. Toxic for fishes.
- **General advices:** Do not allow product to reach ground water, water course or sewage system even in small quantities. Danger to drinking water if even small quantities leak into the ground.  
In water toxic for fishes, very toxic for water organisms.
- **Water hazard class:** 2 (VwVwS): hazardous for water.

## 13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal according to local regulations as pharmaceutical waste.

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- **Empty contaminated packaging:**
- **Recommendation:** Disposal according to the local regulations.

## 14 Transport informations

- **Land transport according to ADR:**
- **Proper shipping name:** Environmentally hazardous substance, solid, n.o.s., Zinc oxide
- **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
- **Tunnel code:** E
- **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:** GHS09
- **Signal word:** Warning
- **H-Phrases:**  
H410 Very toxic to aquatic life with long lasting effects
- **P-Phrases:**  
P273 Avoid release to the environment
- **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.

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