


<p>Page 1 of 4</p> <p>Print Date 20.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Borsäure cryst.</p>	 <p>Revision Date 20.11.2018</p>
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1 Identification of the substance/mixture and of the company/undertaking

· **Informations to product No. 2010**

· **Product name:**

Borsäure cryst.
Acidum boricum
Boric acid

· **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:**

H360 May damage fertility or the unborn child

· **P- Phrases:**

P202 Do not handle until all safety precautions have been read and understood


Repr. 1B

3 Composition / information on ingredients

· **Chemical characterization:**

CAS-No. Substance name

10043-35-3 Boric acid

<p>Page 2 of 4</p> <p>Print Date 20.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Borsäure cryst.</p>	 <p>Revision Date 20.11.2018</p>
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- **EINECS-No.:** 233-139-2
- **EC-Index-No.:** 005-007-00-2
- **REACH Reg. No.:** 01-2119486683-25-0000
- **INCI-Name:** Boric Acid

4 First aid measures

- **after inhalation:** Fresh air. Get medical advice.
- **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.
- **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.
- **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 and well-ventilated place. At room temperature (+15°C to +25°C).
- **Advices on common storage:** Not required.
- **Additional informations to storage conditions:** none

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 protections mask, required if dusts are generated

<p>Page 3 of 4</p> <p>Print Date 20.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Borsäure cryst.</p>	 <p>Revision Date 20.11.2018</p>
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- **Hand protection:** Protection gloves of rubber or latex.
- **Eye protection:** Tightly closing Safety glasses

9 Physical and chemical properties

- **Form:** fine crystalline powder.
- **Colour:** white
- **Odour:** odourless
- **Melting point / melting range:** 185 °C (decomp.)
- **Boiling point / boiling range:** not determined
- **Density:** (20 °C) 1,44 g/cm³
- **Bulk density:** (20 °C) 400 - 600 kg/m³
- **Solubility in / Miscibility with**
- **Water:** (20 °C) 50 g/l
- **Water:** (100 °C) readily soluble
- **Glycerol 85%:** soluble
- **Ethanol 96%:** (78 °C): 100g/l
- **pH-range:** (33g/l, 20 °C) 3,8 - 4,8

10 Stability and reactivity


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

11 Toxicological information

- **Acute toxicity:**
- LD/LD50-data relevant for hazard classification:**
- 10043-35-3 Boric acid
- Oral: LD50: 2660 mg/kg (rat)
- Inhalative: LD50: >2,03mg/l (rat)
- Dermale: LD50: >2,000mg/kg (rat)
- **Primary irritant effect:**
- On skin: Slightly irritant
- On eyes: Slightly irritant
- **Sensitization:** Not sensitizing
- **Gentoxicity:** negative
- **Additional toxicological informations:** Animal experiments showed evidence for harmful effect on fetus. After absorption of large quantities: agitation, spasms, fatigue, ataxia (impaired locomotor coordination).

12 Ecological information

- **Aquatic toxicity:**
- Fishes: LC50 Oncorhynchus mykiss: 50 - 100 mg/l; 96 h (ECOTOX Database)
- Daphnia: EC50 Daphnia magna: 133 mg/l; 48 h (ECOTOX Database)
- Biodegradation: (not applicable for anorganic substances)

<p>Page 4 of 4</p> <p>Print Date 20.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Borsäure cryst.</p>	 <p>Revision Date 20.11.2018</p>
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Bioaccumulation: Not likely.

- **General advices:** Prevent from entering sewage water or drainage ditch undiluted or unneutralized.
- **Log p(O/W):** (20 °C) 0,757
- **Water hazard class:** 1 (VwVwS): slightly hazardous for water.

13 Disposal considerations

- **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.

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:** GHS08
- **Signal word:** Danger
- **H-Phrases:**
H360 May damage fertility or the unborn child
- **P- Phrases:**
P202 Do not handle until all safety precautions have been read and understood
- **National regulations (Germany):**
- **Water hazard class:** see chapter 12
- **Storage class TRGS 510:** 6.1D

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.