

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.08.2007

Revision: 26.08.2007

**1 Identification of substance:**

· **Product details:**

· **Trade name:** Boric Acid

· **Article number:** 4035

· **Application of the substance / the preparation**

Chemicals for synthesis

Laboratory chemicals

· **Manufacturer/Supplier:**

Mallinckrodt Baker B.V

P.O.Box 1

7400 AA Deventer

The Netherlands

· **Informing department:**

Quality Systems & Regulatory Affairs

E-mail : [sjors.duteweert@covidien.com](mailto:sjors.duteweert@covidien.com)

· **Emergency information:**

Environment Health & Safety department

during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

Tel(+31)(0) 570-687500

Fax(+31)(0) 570-687574

E-mail : [jtbaker.nl@covidien.com](mailto:jtbaker.nl@covidien.com)

**2 Hazards identification**

· **Hazard designation:**



Xi Irritant

· **Information pertaining to particular dangers for man and environment**

R 43 May cause sensitisation by skin contact.

**3 Composition/information on ingredients**

· **Chemical characterization:**

· **CAS No. Designation:**

10043-35-3 Boric Acid

· **Identification number(s):**

· **EINECS Number:** 233-139-2

**4 First aid measures**

· **After inhalation**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly.

· **After eye contact** Rinse opened eye for several minutes under running water.

· **After swallowing**

Rinse out mouth and then drink plenty of water.

Induce vomiting and call for medical help.

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.08.2007

Revision: 26.08.2007

**Trade name: Boric Acid**

(Contd. of page 1)

**5 Fire fighting measures**

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Protective equipment:** Wear self-contained breathing apparatus.

**6 Accidental release measures**

- **Person-related safety precautions:** Avoid causing dust.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** No special measures required.

**7 Handling and storage**

- **Handling**
- **Information for safe handling:** Open and handle container with care.
- **Information about protection against explosions and fires:** Keep breathing equipment ready.
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

**8 Exposure controls and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with critical values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Store protective clothing separately.
- **Breathing equipment:** Filter P2.
- **Protection of hands:**  
Protective gloves.  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
Butyl rubber, BR  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.
- **Body protection:** Protective work clothing.

GB

(Contd. on page 3)

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.08.2007

Revision: 26.08.2007

Trade name: Boric Acid

(Contd. of page 2)

**9 Physical and chemical properties:**

· **General Information**

Form: Crystalline powder  
Colour: White  
Smell: Odourless

· **Change in condition**

Melting point/Melting range: 169 (Zers.)°C  
Boiling point/Boiling range: 300°C  
Flash point: n/a

· **Inflammability (solid, gaseous)** Product is not inflammable.  
· **Danger of explosion:** Product is not explosive.

· **Steam pressure at 20°C:** 0 hPa  
· **Density at 20°C** 1.435 g/cm<sup>3</sup>

· **Settled apparent density at 20°C** 500 kg/m<sup>3</sup>  
· **Solubility in / Miscibility with**  
Water at 20°C: 300 g/l (-)  
· **pH-value (33 g/l) at 20°C:** 3.8-4.8

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** Heat,boiling teperatures.
- **Materials to be avoided:**  
carbonates  
Acetic anhydride  
Potassium  
Acetic Anhydride  
Alkalis  
Carbonate
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of composition:** No dangerous decomposition products known

**11 Toxicological information**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	2660 mg/kg (rat)
	LDLo	429 mg/kg (MAN)
		200 mg/kg (wmn)

- **Primary irritant effect:**
- **on the skin:** Irritant
- **on the eye:** irritation
- **Sensitization:** Sensitization possible by skin contact.
- **Sensitisation** May cause sensitisation by skin contact.

**12 Ecological information:**

- **General notes:**  
Water hazard class (D) 1 (Assessment by list): slightly hazardous for water.

(Contd. on page 4)

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 26.08.2007

Revision: 26.08.2007

**Trade name: Boric Acid**

(Contd. of page 3)

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

**13 Disposal considerations**

- **Product:**
- **Recommendation**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)** n/a
- **ADR/RID-GGVS/E Class:** -
- **Maritime transport IMDG/GGVSea:**
- **IMDG/GGVSea Class:** -
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

**15 Regulatory information**

- **Designation according to EC guidelines:**  
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Code letter and hazard designation of product:**  
Xi Irritant
- **Risk phrases:**  
43 May cause sensitisation by skin contact.
- **Safety phrases:**  
24 Avoid contact with skin.  
37 Wear suitable gloves.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
53 Avoid exposure - obtain special instructions before use.

**16 Other information:**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** Quality Assurance Department
- **Contact:** Sjors duteweert
- **\* Data compared to the previous version altered.**