

according to Regulation (EC) No 1907/2006

TETRABOR™ Powder

Print date: 03.08.2012

Product code: 0418

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

1.1. Product identifier

TETRABOR™ Powder

 REACH Registration Number:
 01-2119497788-10-0000

 CAS No:
 12069-32-8

 EC No:
 235-111-5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Uses by workers in industrial settings:

- Industrial use, production of ceramic articles
- industrial use, intermediate in the production of another substance
- abrasive
- production and use of refractoray products
- use as boriding agent for metal surface products

Use by professional workers: - use as abrasive

1.3. Details of the supplier of the safety data sheet

Company name:	Artur Gloeckler GmbH	
Street:	Poststr.6	
Place:	D-63796 Kahl am Main	
Telephone:	+49 6188 9174 0	Telefax: +49 6188 9174 20
e-mail:	info@gloeckler.com	
Contact person:	Mr Bernhard Schmitt	Telephone: +49 6188 9174 11
e-mail:	sdb@gloeckler.com	
Internet:	www.gloeckler.com	
1.4. Emergency telephone:	06188-917412 Contact times of emergency phone number: Mon - Fri 7am - 4 pm	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This substance is not classified as dangerous according to Directive 67/548/EEC.

GHS classification

This substance is not classified as dangerous according to Regulation (EC) No. 1272/2008.

2.2. Label elements

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization Boron carbide

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air.



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After contact with skin

No special measures are necessary.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Seek medical attention if problems persist.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Extinguishing powder. Sand. Foam.

Extinguishing materials should be selected according to the surrounding area.

Extinguishing media which must not be used for safety reasons

Water.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Remove all sources of ignition.

6.2. Environmental precautions

Avoid generation of dust.

6.3. Methods and material for containment and cleaning up

Collect mechanically. Treat the assimilated material according to the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid generation of dust.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store only in original container. Keep container dry. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

CAS-No 12069-32-8 PNEC aqua (freshwater) 0.1 mg/l PNEC soil 1 mg(kg

8.2. Exposure controls

Occupational exposure controls

Do not breathe dust.

Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and at the end of work. When using do



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TETRABOR™ Powder Print date: 03.08.2012 Product code: 0418 Page 3 of 5 not eat or drink. **Respiratory protection** In the case of the formation of dust. half-mask with filter (DIN EN 149). Hand protection Refer to chapter 7. No further action is necessary. Eye protection Tightly sealed safety glasses. DIN EN 166 **SECTION 9: Physical and chemical properties** 9.1. Information on basic physical and chemical properties Powder Physical state: Colour: black Odour: odourless Test method pH-Value: not applicable Changes in the physical state Melting point: 2450 °C No data available Boiling point: Flash point: not applicable Lower explosion limits: 125 g/m³ Upper explosion limits: Ignition temperature: not applicable Auto-ignition temperature not applicable Solid: No data available Vapour pressure: Density (at 20 °C): 2,51 g/cm3 0,000072 g/L OECD 105 Water solubility: (at 20 °C) Solubility in other solvents Solubility in water (g/l): practically insoluble Fat solubility (g/l): No data available Viscosity / dynamic: not applicable 9.2. Other information Package density: 500-1900 kg/m³ **SECTION 10: Stability and reactivity**

10.1. Reactivity

Material does not decompose at normal ambient temperatures.

10.2. Chemical stability

Material is stable under normal conditions.

10.3. Possibility of hazardous reactions

none known

10.5. Incompatible materials

none known



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10.6. Hazardous decomposition products

Material is stable under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

12069-32-8 Borkarbid

Acute toxicity, oral (LD50:) >2000 mg/kg (Rat. female.) OECD 423 Acute toxicity, dermal (LD50:) >2000 mg/kg (Rat.) OECD 402 Acute toxicity, inhalant (Rat. female.) Boron carbide whiskers are not acute toxic when instilled intratracheal to rats. (Fischer F344N/TacfBR)

Irritation and corrosivity

No data available

Sensitising effects

No data available

Severe effects after repeated or prolonged exposure

No data available

Carcinogenic/mutagenic/toxic effects for reproduction

No experimental indications of mutagenicity in-vivo exist. Ames test negative. Reproductive toxicity: No data available Carcinogenicity No data available

SECTION 12: Ecological information

12.1. Toxicity

Acute fish toxicity (LC50:) 100 mg/l 96h Oncorhynchus mykiss (OECD 203) Acute Daphnia toxicity (EC50:) >100 mg/l 48h Daphnia magna (OECD 202) Bacterial toxicity: > 1000 mg/kg 14d Eisenis foetida (OECD 207)

12.2. Persistence and degradability

Poorly watersoluble, inorganic product. Can be mechanically precipitated to a large extent in biological sewage plants.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

Solubility in water < 1 mg/l at 20°C.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Waste disposal according to official state regulations. Completely emptied packings can be re-cycled.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport) Not restricted

Inland waterways transport



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Other applicable information (inland waterways transport) Not restricted

Marine transport

Other applicable information (marine transport) Not restricted

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Water contaminating class (D):

- - not water contaminating

SECTION 16: Other information

Changes

Revision date: 2010-01-28 Revision date: 2011-12-15

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations.