

# Safety Data Sheet

## Boron carbide powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

<b>Product name</b>	Boron carbide powder
<b>Product code</b>	NC-0015
<b>CAS</b>	12069-32-8
<b>REACH No. :</b>	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
<b>Identified uses</b>	Laboratory chemicals, Manufacture of substances
<b>Supplier</b>	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D – 74076 Heilbronn Germany
<b>Telephone</b>	+49 (0)7131-89839-0
<b>Fax</b>	+49 (0)7131-89839-109
<b>Emergency telephone</b>	+49 (0)176-84850874
<b>Email</b>	<a href="mailto:msds@iolitec.de">msds@iolitec.de</a>

### 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Acute toxicity (inhalation), Category 4, H332

Skin corrosion/irritation, Category 2, H315

Serious eye damage/Eye irritation, Category 2, H319

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation, Category 3, H335

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### Classification (67/548/EEC or 1999/45/EC)

Harmful by inhalation. Irritating to eyes, respiratory system and skin.

## 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008, GHS)

Pictogram



Signal word

Warning

### Hazard statement(s)

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

### Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protectic gloves/protective clothing/eye protection/face protection .
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Caution - substance not yet tested completely.

Supplemental Hazard Statements none

### Labelling (67/548/EEC or 1999/45/EC)

Hazard symbol(s)



R-phrase(s)

R20 Harmful by inhalation.

R36/37/38 Irritating to eyes respiratory system and skin.

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**S-phrase(s)**

S9 Keep container in a well-ventilated place.  
 S22 Do not breathe dust.  
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

Caution - substance not yet tested completely.

**3 COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Boron Carbide	99%		Substance not yet fully tested!
<b>Formula</b>	<b>Molecular Weight</b>		
B <sub>4</sub> C	55.25 g/mol		

**4 FIRST AID MEASURES**

**General** Contaminated clothing should be removed and washed before being reused.

**Inhalation** Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/ oxygen.

**Ingestion** Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.

**Skin** Wash the skin immediately with soap and water.

**Eyes** Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at

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least 15 minutes. Get medical attention immediately. Continue to rinse.

### 5 FIRE FIGHTING MEASURES

<b>Extinguishing media</b>	Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
<b>Special fire fighting procedures</b>	No special procedures required.
<b>Protective measures in fire</b>	Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

### 6 ACCIDENTAL RELEASE MEASURES

<b>Personal precautions during spill</b>	Wear protective clothing and avoid inhalation of powder, fume and vapor as well as skin or eye contact.
<b>Spill cleanup methods</b>	Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

### 7 HANDLING AND STORAGE

<b>Handling precautions</b>	Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
<b>Storage precautions</b>	Keep tightly closed.

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### 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Solid, white powder
<b>Odor/taste</b>	Odorless
<b>Boiling Point</b>	>2500 °C
<b>Melting Point</b>	2350°C
<b>SG/Density</b>	2.52 g/cm <sup>3</sup> at 20 °C

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### 10 STABILITY AND REACTIVITY

<b>Solubility in Water</b>	Insoluble
<b>Stability</b>	No particular stability concerns.
<b>Conditions to avoid</b>	Oxidizing agents.
<b>Hazardous Decomposition</b>	
<b>Products</b>	Carbon oxides, Borane/boron oxides

### 11 TOXICOLOGICAL INFORMATION

**Acute toxicity**

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

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### Potential health effects

#### Ingestion

Harmful if swallowed.

#### Inhalation

May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

#### Skin

May cause irritation.

#### Eyes

May cause irritation.

#### Sub acute to chronic toxicity:

Boron effects the central nervous system. Boron poisoning causes depression of circulation, persistent vomiting and diarrhea, followed by profound shock and coma. The temperature may become subnormal and scarletine form rash may cover the entire body.

### Additional Information

RTECS: Not available

**Full Data on the toxicity of this product are not available. Hazardous properties cannot be excluded.**

## 12 ECOLOGICAL INFORMATION

Do not allow material to be released to the environment without proper government permits.

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### 13 DISPOSAL CONSIDERATIONS

**Disposal method** Contact specialist disposal companies. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

### 14 TRANSPORT INFORMATION

**General** Not classified as dangerous for transport purposes.

**Road transport notes** Not classified as dangerous for road transport.

**Rail transport notes** Not classified as dangerous for rail transport.

**Sea transport notes** Not classified as dangerous for sea transport.

**Air transport notes** Not classified as dangerous for air transport.

### 15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

**Chemical Safety Assessment**

no data available

**Country specific information:**

**Germany**

WGK 3 - hazardous to waters (self classification)



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### 16 OTHER INFORMATION

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