

1. IDENTIFICATION OF SUBSTANCES / MIXTURE AND OF THE COMPANY / UNDERTAKING**Product Identifiers**

Product Name: **Boron carbide**
Product code: OCON-024, OCON-025, OCON-026, OCON-027, OCON-028, OCON-029
CAS number: 12069-32-8
EC number: 235-111-5

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

Identified uses: Abrasive material for polishing applications
Uses advised against: This product is to be used only for the purpose stated above.

Details of the supplier of the safety data sheet

Manufacturer: Logitech Ltd
Erskine Ferry Road
Old Kilpatrick
Glasgow
G60 5EU
Scotland, UK

Telephone +44 (0) 1389 875444
E-mail coshh.info@logitech.uk.com

Emergency telephone number

+44 (0) 1389 875444 (09:00 – 17:00 Monday to Friday)

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

This material is a substance

Classification according to Regulation (EC) 1272/2008 (EU 'CLP' regulation) as amended

Acute Tox. (inhalation) Category 4 H332 - Harmful if inhaled

Classification according to CHIP and EU Directives 67/548/EEC or 1999/45/EC

Symbol(s) Xn- Harmful
Risk phrase(s) R20 - Harmful by inhalation

Label elements**Labelling elements according to Regulation (EC) 1272/2008 (EU 'CLP' regulation)**

Pictogram (s):



Signal Word: **WARNING**

Hazard Statements

Harmful if inhaled

Precautionary Statements

Avoid breathing dust

Labelling elements according to CHIP and EU Directives 67/548/EEC or 1999/45/EC

Symbol:



Indication of Danger: HARMFUL

Risk phrases: Harmful by inhalation

Safety phrases: Do not breathe dust.
Wear suitable protective clothing, gloves and eye/face protection.
In case of insufficient ventilation, wear suitable respiratory equipment.

Other hazards

No information available

3. COMPOSITION / INFORMATION ON INGREDIENTS

This material is a substance

Component	CAS No.	EC No.	%
Boron Carbide	12069-32-8	235-111-5	>98

4. FIRST AID MEASURES

Description of first aid measures

General advice

Remove from source of exposure.

Inhalation

Remove from exposure, rest and keep warm. If a significant quantity was inhaled, or if there are signs of irritation or difficulty breathing seek medical attention.

Ingestion

Wash out mouth thoroughly with water. Do not induce vomiting. If discomfort experienced, seek medical attention

Skin contact

Rinse well with plenty of water. In the event of persistent irritation seek medical advice

Eye contact

Rinse immediately, including under the eye lids, with plenty of water for at least 10 minutes. If irritation persists seek medical advice.

Most important symptoms and effects, both acute and delayed

No specific effects and/or symptoms have been reported or are known.

Indication of any immediate medical attention and special treatment needed

None

5. FIRE-FIGHTING MEASURES

Extinguishing media

This product does not burn readily.

Suitable extinguishing media: Water spray, alcohol resistant foam, dry extinguishing powder, carbon dioxide

Unsuitable extinguishing media: None

Special hazards arising from the substances or mixture

Boron / borane compounds may be formed.

Advice for fire fighters

Use self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep people away from the spillage.

Take precautions to minimise the generation of airborne dust.

Provide adequate ventilation

Avoid breathing airborne dust – wear Personal Protective Equipment (PPE) if necessary.

Minimise skin and eye contact to prevent irritation by mechanical action..

Environmental precautions

Minimise release to environment. This product is not environmentally harmful but release to the environment must not be considered as a disposal route.

Methods and material for containment and cleaning up

Dampen spillage with water to minimise dust generation, then sweep up and place in a container for disposal.

Remove final residues with wet cloths or rinse to foul sewer with water

Reference to any other sections

See section 8 for details of Personal Protective Equipment (PPE)

See section 13 for disposal information

7. HANDLING AND STORAGE

Precautions for safe handling:

Do not breathe dust – provide adequate ventilation or extraction.

minimise contact with skin, eyes, and clothing to prevent irritation by mechanical action..

Wear personal protective equipment if necessary to control such contact.

Dusts may form explosive mixtures with air: Areas containing powder with particle size <10µm may be rated as class ST1 under DSEAR.

Conditions for safe storage, including any incompatibilities

Keep containers sealed in a cool, well ventilated area.

Powder with particle size <10µm can react with oxygen (air) and humidity yielding oxides and borates with heat generation.

Specific end use(s)

None identified

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure limits

There is no UK Workplace Exposure Limit (WEL) or EU Indicative Occupational Exposure Limit Value (IOELV) for this material. This does NOT mean that exposure to dust does not need to be controlled.

The use of the general (nuisance) dust WEL is NOT appropriate to this material. Exposure should be controlled to a lower level of exposure.

Exposure limits may be specified in other countries. Check national legislation for appropriate exposure limits.

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration (PNEC) No information available

Exposure controls

Appropriate engineering controls

Use ventilation (natural or forced) or extraction to minimise inhalation of dust.

Personal protective equipment

Eye / face protection

If eye contact is likely wear EN approved safety glasses with side shields, goggles or face shield.

Skin protection:

Wear any gloves that provide a barrier to powder contact. Replace gloves before the inner surface becomes contaminated with the powder.

Wear long sleeved clothing.

Respiratory protection:

If necessary to minimise exposure to dust, wear an EN149 approved respirator fitted with a particle filter (filter type P1, P2 or P3).

The correct selection, fitting, use, storage and maintenance of respiratory protective equipment is important. Follow manufacturer's recommendation or seek expert advice. HSE document HSG 53 provides some guidance

The use of respiratory protection should only be considered as a short term safety measure until effective engineering controls are implemented.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemicals properties

Appearance:	black powder.
Odour:	Odourless
Odour threshold:	not applicable
pH:	6 – 7 (100g/L water)
Melting point:	2450°C
Boiling point:	3500 °C
Flash point:	information not available
Evaporation rate	information not available
Flammability	information not available
Upper/lower explosive limits	Upper - information not available Lower - information not available
Vapour pressure	not applicable – stable solid
Vapour density	not applicable – stable solid
Density	2.51 g/cm ³
Bulk density	0.5 – 1.9 g/cm ³
Log P (o/w)	information not available
Solubility in water:	virtually insoluble
Solubility in other	
Ingredients:	information not available
Partition coefficient	
Octanol/water:	information not available
Auto-ignition temperature	information not available
Decomposition temperature	information not available
Viscosity	information not available
Ignition temperature	information not available
Oxidising properties:	Not oxidising.

Other information

No additional data available

10. STABILITY AND REACTIVITY

Reactivity

Not reactive to materials commonly used in the transportation, handling and storage.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

No hazardous reactions known under normal conditions of use

Conditions to avoid

Excessive heat, incompatible materials.

Incompatible materials

Powder with particle size <10µm can react with oxygen (air) and humidity yielding oxides and borates with heat generation.

Hazardous decomposition products

Boron oxides, borates.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	no data available.
Skin corrosion/irritation	no data available.
Serious eye damage/ eye irritation	no data available.
Respiratory or skin sensitisation	no data available.
Germ cell mutagenicity	no data available.
Carcinogenicity	Not classified as carcinogenic.
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.

Further information

The chemical, physical, and toxicological properties have not been fully investigated

12. ECOLOGICAL INFORMATION

Toxicity

Acute toxicity for fish (<i>Leuciscus idus</i>)	no data available
Acute toxicity for crustacea (<i>Daphnia magna</i>)	no data available
Acute toxicity for algae (<i>Selenastrum capricornutum</i>)	no data available

Persistence and biodegradability

Data not available

Bioaccumulative potential

Data not available.

Mobility in Soil

Insoluble in water

Results of PBT and vPvB assessment

Data not available. Not expected to be classified as PBT or vPvB.

Other adverse effects

Data not available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Dispose of product as hazardous waste in accordance with local, national and international legislation, using an approved registered waste disposal company.
The European Waste Code will depend upon the use of the product and cannot be specified here.

Packaging

Clean packaging can be disposed of as general waste: European Waste Code 15 01 xx (xx will depend upon the type of packaging e.g. plastic, cardboard etc. Refer to European Waste Catalogue).

Containers previously used to store this product that are now free of the product (residues can be removed by washing) can be disposed of as general (non-hazardous) waste. Recycle such containers where possible.

14. TRANSPORT INFORMATION

UN number

Not a dangerous good

UN proper shipping name

Not a dangerous good

Transport hazard class(s)

Not a dangerous good

Packing group

Not a dangerous good

Environmental hazards

Not a dangerous good

Special precautions for user

None identified

Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code

No information available

15. REGULATORY INFORMATION

This Safety Data Sheet has been prepared in accordance with the requirements of regulation (EC) No 1907/2006 as amended by regulation (EU) No 453/2010.

Workplace Exposure Limit given in section 8 have been taken from the UK HSE document: EH40/2005 Workplace exposure limits as amended.

Relevant regulations:

Regulation (EC) 1272/2008 (EU 'CLP' regulation)

Regulation (EC) 790/2009 First Adaptation to Technical Progress (ATP) for CLP regulation

Regulation (EC) 286/2011 Second Adaptation to Technical Progress (ATP) for CLP regulation

EU Directive 67/548/EEC ('Dangerous Substances Directive')

Regulation (EC) No 1907/2006 ('REACH')

Regulation (EU) No 453/2010.

DSEAR: Dangerous Substances and Explosive Atmospheres Regulations 2002

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

None identified

Chemical safety assessment

A Chemical Safety Assessment has not been undertaken for this product.

16. OTHER INFORMATION

Changes from previous version (version 2):

- a) Section 1 Additional product code added
- b) Section 1 Additional product identifier information provided
- c) Section 2 Addition of precautionary phrase in labelling information
- d) Section 2 Labelling information now provided in accordance with both CHIP and CLP regulations

The information contained in the Safety Data Sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, storage, transportation and disposal. It is not intended as a warranty or specification. The information relates only to the product specified and may not be suitable for combinations with other materials.