



## Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

#### 1.1. Product identifier

3M Boron Carbide

##### Product Identification Numbers

CY-9990-0615-8	CY-9990-0620-8	CY-9990-0828-7	CY-9990-0829-5	CY-9990-0830-3
CY-9990-0831-1	CY-9990-0833-7	CY-9990-0835-2	CY-9990-0836-0	CY-9990-0837-8
CY-9990-0839-4	CY-9990-0840-2	CY-9990-0842-8	CY-9990-0844-4	CY-9990-0848-5
CY-9990-0849-3	CY-9990-0850-1	CY-9990-0851-9	CY-9990-0852-7	CY-9990-0853-5
CY-9990-0857-6	CY-9990-0858-4	CY-9990-0859-2	CY-9990-0860-0	CY-9990-0861-8
CY-9990-0862-6	CY-9990-0863-4	CY-9990-0864-2	CY-9990-0865-9	CY-9990-0866-7
CY-9990-0867-5	CY-9990-0871-7	CY-9990-0874-1	CY-9990-0876-6	CY-9990-0877-4
CY-9990-0878-2	CY-9990-0879-0	CY-9990-0880-8	CY-9990-0881-6	CY-9990-0882-4
CY-9990-0883-2	CY-9990-0884-0	CY-9990-0885-7	CY-9990-0886-5	CY-9990-0888-1
CY-9990-0889-9	CY-9990-0890-7	CY-9990-0891-5	CY-9990-0892-3	CY-9990-0893-1
CY-9990-0894-9	CY-9990-0895-6	CY-9990-0896-4	CY-9990-1560-5	CY-9990-1561-3
CY-9990-8760-4	CY-9990-9395-8	CY-9990-9480-8	CY-9990-9781-9	CY-9991-0753-5
CY-9991-1608-0	UU-0091-0413-2	UU-0091-0414-0	UU-0092-7180-8	UU-0096-8049-5
UU-0102-8889-0	UU-0103-5149-0	UU-0107-3558-5	UU-0110-4781-6	UU-0110-4782-4
UU-0112-5922-1	UU-0112-6478-3			

7010231881	4010030096	7010251880	7010251882	7010254403
7010240056	7010230195	7010251875	7010234390	7010235111
7010253648	7010231951	7010241436	7010251907	7010239714
7010241437	7010251876	7010239699	7010251908	7010252862
7010274047	7010253301	7010239718	7010239941	4010030019
7010235620	7010231925	7010231877	7010234383	7010251883
7010231873	7010235623	7010239703	7010229720	7010274049
7010251885	7010239704	7010274269	7010274048	7010251886
7010234384	7010251881	7010251887	7010239702	7010254503

7010239705	7010252194	7010234399	7010251877	7010251884
7010241553	7010235281	7010252910	7010234381	7010254618
7010286443	7100143635	7100143777	7100152966	4100032211
7100203265	7100207299	7100211993	7100230511	7100230524
7100243986	7100244207			

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

Abrasive Product, intermediate in the production of another substance, Industrial use.

**1.3. Details of the supplier of the safety data sheet**

**Address:** 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.  
**Telephone:** +44 (0)1344 858 000  
**E Mail:** tox.uk@mmm.com  
**Website:** www.3M.com/uk

**1.4. Emergency telephone number**

+44 (0)1344 858 000

**SECTION 2: Hazard identification****2.1. Classification of the substance or mixture**

**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

**CLASSIFICATION:**

This material is not classified as hazardous according to Regulation (EC) No. 1272/2008, as amended for Great Britain, on classification, labelling, and packaging of substances and mixtures.

**2.2. Label elements**

**The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain**

Not applicable

**SUPPLEMENTAL INFORMATION:****Supplemental Precautionary Statements:**

May form combustible dust concentrations in air.

**2.3. Other hazards**

Dust clouds of this material in sufficient concentration in combination with an ignition source may be explosive. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions. Combustible Dust.

This material does not contain any substances that are assessed to be a PBT or vPvB

**SECTION 3: Composition/information on ingredients****3.1. Substances**

<b>Ingredient</b>	<b>Identifier(s)</b>	<b>%</b>	<b>Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB</b>
Boron Carbide	(CAS-No.) 12069-32-8 (EC-No.) 235-111-5	80 - 100	Substance not classified as hazardous

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

**3.2. Mixtures**  
Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin contact

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

#### If swallowed

Do not induce vomiting. Rinse mouth. If you feel unwell, get medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

### 5.2. Special hazards arising from the substance or mixture

Powdered material may form explosive dust-air mixture. Avoid fire fighting methods that would cause powders to become airborne.

### 5.3. Advice for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Eliminate all ignition sources if safe to do so. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Vacuum to avoid dusting. **WARNING!** A motor could be an ignition source and cause combustible dust in the spill area to burn or explode. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

### 6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Dust clouds of this material in sufficient concentration in combination with an ignition source may be explosive. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions. Routine housekeeping should be instituted to ensure that combustible dusts do not accumulate on surfaces. Solids can generate static electricity charges when transferred and in mixing. Combustible dust may form by action of this product on another material (substrate). Dust generated from the substrate during use of this product may be explosive if in sufficient concentration with an ignition source. Dust deposits should not be allowed to accumulate on surfaces because of the potential for secondary explosions.

### 7.2. Conditions for safe storage including any incompatibilities

Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents.

### 7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

#### Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Provide local exhaust at process emission sources to control exposure near the source and to prevent the escape of dust into the work area. It is recommended that all dust control equipment (such as local exhaust ventilation), process equipment, and material transport systems involved in handling of this product be evaluated for the need for explosion-protection safeguards. Recognized safeguards include explosion relief vents, explosion suppression systems, and oxygen deficient process environments. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Evaluate the need for electrically classified equipment.

#### 8.2.2. Personal protective equipment (PPE)

**Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:  
Safety glasses with side shields.

*Applicable Norms/Standards*

Use eye protection conforming to EN 166

**Skin/hand protection**

No chemical protective gloves are required.

**Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

*Applicable Norms/Standards*

Use a respirator conforming to EN 140 or EN 136: filter type P

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	Solid.
<b>Specific Physical Form:</b>	Powder
<b>Colour</b>	Black
<b>Odor</b>	Odourless
<b>Odour threshold</b>	<i>No data available.</i>
<b>Melting point/freezing point</b>	2,450 °C
<b>Boiling point/boiling range</b>	<i>No data available.</i>
<b>Flammability (solid, gas)</b>	Not classified
<b>Flammable Limits(LEL)</b>	125 g/m <sup>3</sup> [ <i>Details:d50 &lt; 10µm</i> ]
<b>Flammable Limits(UEL)</b>	<i>No data available.</i>
<b>Flash point</b>	No flash point
<b>Autoignition temperature</b>	<i>No data available.</i>
<b>Decomposition temperature</b>	<i>No data available.</i>
<b>pH</b>	<i>substance/mixture is non-soluble (in water)</i>
<b>Kinematic Viscosity</b>	<i>Not applicable.</i>
<b>Water solubility</b>	0.072 mg/l [ <i>Test Method:UN Method</i> ] [ <i>Details:reference temperature 20°C</i> ]
<b>Solubility- non-water</b>	Nil
<b>Partition coefficient: n-octanol/water</b>	<i>No data available.</i>
<b>Vapour pressure</b>	<i>No data available.</i>
<b>Density</b>	2.51 g/cm <sup>3</sup> [ <i>Details:reference temperature 20°C</i> ]
<b>Relative density</b>	<i>No data available.</i>
<b>Relative Vapour Density</b>	<i>No data available.</i>
<b>Particle Characteristics</b>	<i>Not applicable.</i>

## 9.2. Other information

### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds

*No data available.*

Evaporation rate

*No data available.*

Molecular weight

*Not applicable.*

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

Combustible dust build-up on surfaces.

Heat.

Sparks and/or flames.

### 10.5 Incompatible materials

Strong acids.

Strong bases.

Strong oxidising agents.

### 10.6 Hazardous decomposition products

Substance

Condition

None known.

## SECTION 11: Toxicological information

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

### 11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

#### Skin contact

Mechanical skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

#### Eye contact

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

### Ingestion

No known health effects.

### Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Serious Eye Damage/Irritation

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Skin Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Germ Cell Mutagenicity

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Carcinogenicity

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Specific Target Organ Toxicity - repeated exposure

For the component/components, either no data is currently available or the data is not sufficient for classification.

#### Aspiration Hazard

For the component/components, either no data is currently available or the data is not sufficient for classification.

**Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.**

### 11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

**SECTION 12: Ecological information**

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

**12.1. Toxicity**

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Boron Carbide	12069-32-8	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
Boron Carbide	12069-32-8	Water flea	Experimental	48 hours	EC50	>100 mg/l

**12.2. Persistence and degradability**

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Boron Carbide	12069-32-8	Data not available or insufficient	N/A	N/A	N/A	N/A

**12.3 : Bioaccumulative potential**

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Boron Carbide	12069-32-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

**12.4. Mobility in soil**

No test data available.

**12.5. Results of the PBT and vPvB assessment**

This material does not contain any substances that are assessed to be a PBT or vPvB

**12.6. Other adverse effects**

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

**EU waste code (product as sold)**



**SECTION 14: Transportation information**

Not hazardous for transportation.

	<b>Ground Transport (ADR)</b>	<b>Air Transport (IATA)</b>	<b>Marine Transport (IMDG)</b>
<b>14.1 UN number</b>	No data available.	No data available.	No data available.
<b>14.2 UN proper shipping name</b>	No data available.	No data available.	No data available.
<b>14.3 Transport hazard class(es)</b>	No data available.	No data available.	No data available.
<b>14.4 Packing group</b>	No data available.	No data available.	No data available.
<b>14.5 Environmental hazards</b>	No data available.	No data available.	No data available.
<b>14.6 Special precautions for user</b>	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
<b>14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code</b>	No data available.	No data available.	No data available.
<b>Control Temperature</b>	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
<b>ADR Classification Code</b>	No data available.	No data available.	No data available.
<b>IMDG Segregation Code</b>	No data available.	No data available.	No data available.

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Global inventory status**

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in

compliance with the provisions of Japan Industrial Safety and Health Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

**COMAH Regulation, SI 2015/483**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

**Regulation (EU) No 649/2012, as amended for GB**

No chemicals listed

**15.2. Chemical Safety Assessment**

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

**SECTION 16: Other information****Revision information:**

Section 1: Product identification numbers information was modified.

Section 01: SAP Material Numbers information was modified.

Section 09: Particle Characteristics N/A information was added.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

**3M SDSs for Great Britain are available at [www.3M.com/uk](http://www.3M.com/uk)**

For Northern Ireland documents, please contact your 3M representative to obtain a copy.