

MATERIAL SAFETY DATA SHEET

1	PRODUCT NAME REF (MSDS 6)	BORON CARBIDE
	Supplied by:	Lapmaster International Ltd Lee Mill Industrial Estate Ivybridge Devon PL21 9EN Tel: + 44 1752 893191 Fax: + 44 1752 896355
2	Composition:	CAS NO: 12069-32-8 Boron Carbide EC NO: 235-111-5
3	Hazards Identification:	None, Non hazardous
4	First Aid: Inhalation: Contact with Skin: Contact with Eyes: Swallowing:	 Provide fresh air No special measures required. Rinse immediately with plenty of water. Seek medical advice in case of continuous irritation. In case of sickness seek medical advice.
5	Fire-fighting Measures: Suitable Extinguishing Media: Extinguishing media not to be Used for safety reasons: Special exposure hazards: Special protective equipment for fire fighting:	 Sand, extinguishing powder, foam. Do not use WATER. None known. Use respiratory protection independent of recirculated air.

6	<p>Accidental Release Measures:</p> <p>Personal precautions:</p> <p>Environmental precautions:</p> <p>Methods for cleaning up:</p> <p>Further information:</p>	<p>Avoid dust formation. Wear personal protective suit (see section 8.3).</p> <p>Cover any spilled material in accordance with regulations to prevent dispersal by wind.</p> <p>Remove mechanically and dispose of according to regulations. Avoid dust formation.</p> <p>Eliminate all sources of ignition.</p>
7	<p>Handling and Storage:</p> <p>Precautions for safe handling:</p> <p>Precautions against fire and explosion:</p> <p>Conditions for storage rooms and vessels:</p> <p>Advice for storage of incompatible materials:</p>	<p>Avoid dust formation.</p> <p>Keep away from sources of ignition and do not smoke. Keep away from heat, open flames, sparks and other sources of ignition. Fine dust may form explosive mixture with air. Avoid dust formation. Observe precautionary measures against dust explosion. Powder with particle size < 10µm: Substance is rated to dust explosion class st 1 according to German VDI 2263. Powder with particle size < 20 µm: Propagation of a glowing fire is possible. Powder with particle size < 10 µm can react with oxygen (air) and humidity yielding oxides and borates under heat generation.</p> <p>Store in a dry and sheltered place.</p> <p>Not applicable.</p>
8	<p>Exposure Controls/Personal Protection:</p> <p>General protection and hygiene measures:</p> <p>Respiratory protection:</p>	<p>Observe standard industrial hygiene practices for the handling of chemical substances. Do not smoke when handling. Do not breathe dust.</p> <p>Fine dust mask when dust formation during prolonged exposure.</p>

8	Hand protection: Eye protection:	Not required. Protective goggles.
9	Physical and Chemical Properties: Form: Colour: Odour: Melting Point: Boiling Point: Flash Point: Ignition temperature: Lower explosion point: Vapour pressure: Density: Bulk density: Solubility in water: pH-Value: Explosion limits: Thermal decomposition:	Solid – crumbs or powder Black. Odourless. 2450 °C 3500 °C Not applicable. Not applicable. 125 g/m ³ Not applicable. 2,51 g/cm ³ 500 – 1900 kg/m ³ Virtually insoluble 6 – 7 at 20 °C (100 g/l H ₂ O) Value applicable to very fine dust < 10 µm . Not applicable.
10	Stability and Reaction: Hazardous decomposition products: :	If stored and handled in accordance with standard industrial practices and local regulations where applicable: none known.
11	Toxicological Information General information:	Product not investigated. According to our present state of knowledge no damaging effect expected when treated in accordance with standard industrial practices and local regulations where applicable.
12	Ecological Information:	

12	<p>Biodegradation:</p> <p>Further Information:</p> <p>Behaviour in environmental compartments:</p> <p>Ecotoxicological effects:</p> <p>Effects in sewage treatment plants:</p> <p>General information:</p>	<p>Not applicable.</p> <p>Insoluble in water. Separation by sedimentation.</p> <p>No harmful effects expected.</p> <p>No likelihood of damaging effect on water organisms.</p> <p>Can be removed mechanically from wastewater. According to present experience, no adverse effects on water purification plants.</p> <p>No environmental problems expected if handled and treated in accordance with standard industrial practices and local regulations where applicable.</p>
13	<p>Disposal Considerations:</p> <p>Material:</p> <p>Contaminated packaging:</p>	<p>Special disposal. Observe the local bye-laws.</p> <p>Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/national bye-laws.</p>
14	<p>Transport Information:</p> <p>Road GGVS/ADR:</p> <p>Railway GGVE/RID:</p> <p>Sea GVSee/IMDG-Code:</p> <p>Air ICAO-TI/IATA-DGR:</p>	<p>Valuation: Non-Regulated</p> <p>Valuation: Non-Regulated Express: Permitted</p> <p>Valuation: Non-Regulated</p> <p>Valuation: Non-Regulated</p>
15	<p>Regulatory Information:</p> <p>EC-No:</p> <p>SI 1999/3232</p> <p>SI 1999/437:</p> <p>SI 1999/3242:</p>	<p>235-111-5</p> <p>Chip Regulations 1999</p> <p>SI 1999/437: COSHH Regulations 1999</p> <p>Management of Health & Safety At Work Regulations 1999. Health & Safety at Work Act 1974.</p>

	SI 1993/1643:	Environmental Protection Act 1993 & Subsidiary Regulations. Other national and local measures relating to the workplace, pollution control, environmental protection and waste control.
16	Other Information:	The above information is taken from sources believed to be accurate. Lapmaster International Ltd, however, makes no warranty as to the accuracy of the information or suitability of the recommendations as to your operations and assumes no liability to any user thereof.