

<b>MATERIAL SAFETY DATA SHEET</b>
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**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

SUPPLIER: METPREP LTD.  
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CHARTER AVENUE  
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CHEMICAL NAME:

PRODUCT: CUBIC BORON NITRIDE WAFERING BLADE

PRODUCT NUMBERS: Various

**IMPORTANT NOTICE** Cubic boron nitride abrasives are inert products, which do not create any risk when handled or stored. When used on cutting machines they require specific measures to protect operators. During cutting operations 90% or more of the particulate of dust come from the material being cut and, for wet cutting, from aerosols generated by the cutting fluid. Specific attention must therefore be given to the nature of the part and of the fluid and the appropriate protection devices must be installed.

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

CHEMICAL NATURE: cubic boron nitride with resin, metal or vitrified bonds

INGREDIENT (S):	CAS NUMBER:	%	OSHA LIMIT	ACGIH TLV	CARCINOGEN
Cubic Boron Nitride	10043-11-5	1-5	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	N

**3. HAZARDS IDENTIFICATION**

If handled and used for abrasive cutting purposes as indicated, the substance presents no critical hazards to man. EC Directive No 88/379.

**4. FIRST AID MEASURES**

GENERAL INFORMATION: In all cases of doubt, or when symptoms persist, seek medical attention.

INHALATION: In dry applications, abrasive products may generate nuisance dust. There may therefore be a requirement for local exhaust ventilation and/or respiratory protection. Exposure to this dust should be adequately controlled and personal exposure kept below 10 mg m<sup>-3</sup> 8 hour TWA total inhalable dust, or 5 mg m<sup>-3</sup> 8-hour TWA respirable dust. In addition, the airborne concentration of the material should be considered.

SKIN: Should irritation occur, seek medical attention.

EYE: Dust may cause irritation. Abrasive grit in the eyes may cause damage and eye protection is required. In case of grit in the eyes, seek medical/ophthalmic advice.

INGESTION: NA.

**5. FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA: Use any standard extinguishing media.

UNSUITABLE EXTINGUISHING MEDIA:

FIRE FIGHTING PROTECTIVE EQUIPMENT: A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

FURTHER INFORMATION:

**6. ACCIDENTAL RELEASE MEASURES**

PERSONAL PECAUTIONS: NA

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ENVIRONMENTAL PRECAUTIONS: NA  
METHODS OF CLEANING UP: NA

**7. HANDLING AND STORAGE**

HANDLING: Take measures to ensure against mechanical damage. Avoid impacts.

STORAGE: Store in a dry area 10-30 °C and less than 65% relative humidity. Avoid extremes of temperature & humidity.

INDUSTRIAL HYGIENE PRACTICES: Wash face and hands thoroughly with the soap and water after use and before eating, drinking, smoking or applying cosmetics.

**8. EXPOSURE CONTROL / PERSONAL PROTECTION**

Respiratory protection: Approved dust respirators may be required depending on airborne dust concentration.

Hand protection: No specific protection required under normal conditions

Eye protection: Wear suitable goggles

Skin protection: No specific protection required under normal conditions

Hearing Protection: Should be used at all times.

Hazardous substances with occupational exposure limits:

CAS-No	Material	Content (% weight)	Long term exposure limit mg m <sup>-3</sup>
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**9. PHYSICAL AND CHEMICAL PROPERTIES**

FORM:	Solid
COLOUR:	
ODOUR:	None as supplied.
PH	NA at 20 °C
BOILING POINT:	NA °C
MELTING POINT:	NA °C
THERMAL DECOMPOSITION:	NA °C
IGNITION TEMPERATURE:	NA °C
VAPOUR PRESSURE:	NA at 20 °C
SPECIFIC GRAVITY:	2 - 4 g/cm <sup>3</sup>
BULK DENSITY:	NA kg/m <sup>3</sup>
WATER SOLUBILITY:	Slight
MISCIBILITY WITH WATER:	NA
VISCOSITY:	NA at 25 °C

**10. STABILITY AND REACTIVITY**

CONDITIONS TO AVOID: No hazardous reactions known. Excessive heat and humidity.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong acids, strong bases & strong oxidising agents may modify the mechanical characteristics of the product and create safety hazards when used on machines.

HAZARDOUS DECOMPOSITION PRODUCTS: If wheels are used in accordance with instructions no hazardous decomposition products are created.

**MATERIAL SAFETY DATA SHEET****11. TOXICOLOGICAL INFORMATION**

NOT APPLICABLE WHEN HANDLED OR STORED

According to the experience gathered for many years, cubic boron nitride abrasives, when properly used have no adverse effect on health, refer to the preliminary not about dust and aerosols of cutting fluid.

**12. ECOLOGICAL INFORMATION**

Based upon current information, there are no special regulations on degradability testing to be observed.

**13. DISPOSAL CONSIDERATIONS**

PRODUCT: Dispose of in a secured, sanitary landfill and in accordance with local regulations. In the U.K., this abrasive product is not considered as notifiable waste.

**14. TRANSPORTATION**

LAND TRANSPORT:

ADR

REGULATION: Not dangerous goods – full transport

RID:

REGULATION: Not dangerous goods – full transport

AIR TRANSPORT –

IATA CLASS:

REGULATION Not dangerous goods – full transport

OCEAN TRANSPORT –

IMDG CLASS:

REGULATION Not dangerous goods – full transport

**15. REGULATORY INFORMATION**

EC REGULATIONS –

EINECS: all chemical listed

EEC Classification:

Risk Phrases:

Safety Phrases:

HAZARDOUS COMPONENTS WHICH MUST BE LISTED ON THE LABEL:

NATIONAL LEGISLATION:

NOTIFICATION STATUS: EINECS Not Required  
TSCA

**16. ADDITIONAL INFORMATION**

This data sheet was prepared in accordance with Directive 91/155/EEC.

The above information has been gathered from reliable sources and is believed to be correct. However, the information is provided without any warranty, either expressed or implied. MetPrep Ltd shall not be held liable for any damage resulting from the handling of or contact with the above product.