

# Material Safety Data Sheet

<b>Section 1: Chemical Product and Company Information</b>	
<b>Product Name</b> <b>Trade Name</b>	Vitrified Bonded CBN Products Grinding Wheels or Stones
<b>Manufacturer</b>	Radiac Abrasives, Inc. 1015 S. College Avenue P.O. Box 1410 Salem, IL 62881
<b>Phone Number</b> <b>Fax Number</b>	618-548-4200 618-548-4207
<b>Effective Date</b>	October 30, 2009

<b>Section 2: Composition/Information on Ingredients</b>						
<i>May contain the following ingredients</i>						
<b>Chemical Name</b>	<b>CAS #</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>NIOSH</b>	<b>Carc. Y/N</b>	<b>Max. %</b>
Aluminum Oxide	1344-28-1	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>	NA	N	15
Silicon Carbide	409-21-2	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	N	15
Cubic Boron Nitride	10043-11-5	NA	3 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	N	75
Glass or Glass/Porcelain	NA	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	N	30
Ceramic Microspheres	NA	NA	NA	NA	N	15

<b>HMIS Hazard Rating</b>	
Health	0
Flammability	0
Reactivity	0
Personal Protection	E

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## **Section 3: Hazards Identification**

<b>Emergency Overview:</b>	Dust may be irritating. May cause delayed lung damage. Low hazard to usual industrial or commercial handling.
<b>Target Organs:</b>	Respiratory System
<b>Inhalation:</b>	Grinding generates dust. Prolonged exposure to grinding dust may cause respiratory problems or aggravate existing conditions. Inhalation during grinding can cause coughing and shortness of breath. Consideration should also be given to the airborne concentration of the material being ground.
<b>Eye Contact:</b>	Dust generated during grinding may irritate eyes.
<b>Skin Contact:</b>	Excessive contact with dust may cause irritation.
<b>Ingestion:</b>	No known effects but ingestion is not recommended.
<b>Other:</b>	Some grinding operations may cause noise or vibration irritation. Grinding wheels are not a known carcinogen.

## **Section 4: First Aid Measures**

<b>Eyes:</b>	Immediately flush with plenty of water. Get medical attention if irritation persists.
<b>Skin:</b>	Wash skin with soap and water. Get medical attention if irritation persists.
<b>Inhalation:</b>	Move to fresh air.
<b>Other:</b>	If hearing problems persist, obtain medical assistance if necessary.

## **Section 5: Fire Fighting Measures**

<b>Flash Point:</b>	None
<b>Flammable Limits:</b>	None
<b>Extinguishing Media:</b>	Any media appropriate for the surrounding fire.
<b>Fire Fighting Equipment:</b>	Fire fighters should wear goggles and self-contained breathing apparatus to avoid inhalation of smoke or vapors.
<b>Fire and Explosion Hazards:</b>	None from this product. Consideration must be given to the potential fire/explosion hazards from the material being processed. Many materials create flammable/explosive dusts when ground.

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## **Section 6: Accidental Release Measures**

<b>Clean Up:</b>	Use normal clean up procedures.
<b>Disposal:</b>	Dispose of in accordance with local, state and federal regulations.

## **Section 7: Handling and Storage**

<b>Handling:</b>	Do not use at speeds greater than product was made to be used. Inspect wheel for damage on arrival and prior to mounting on machine. Avoid breathing dust. Avoid skin and eye contact with grinding dust. Use in well ventilated area.
<b>Storage:</b>	Wheels should not be exposed to water or other solvents; any temperature or humidity condition that causes condensation on the wheels or freezing temperatures. See ANSI B7.1, 2.3.

## **Section 8: Exposure Controls/Personal Protections**

<b>Respiratory Protection:</b>	Use NIOSH approved respirators as required to maintain exposure below Threshold Limit Values (TLV/TWA). See OSHA 29 CFR 1910.134.
<b>Skin Protection:</b>	Leather, cloth, rubber or vinyl gloves as desired by user.
<b>Eye Protection:</b>	Safety goggles or safety glasses with side shields are recommended. See OSHA 29 CFR 1910.133.
<b>Hearing Protection:</b>	See OSHA 29 CFR 1910.215 concerning hearing protection.
<b>Engineering Controls:</b>	Local exhaust ventilation as necessary to keep dust levels below Threshold Limit Values (TLV/TWA).
<b>Other Precautions:</b>	Visually inspect all wheels before mounting for possible damage. Do not operate above maximum operating speed. Always use a guard. Refer to ANSI B7.1 for the "Safety Requirements for the Use, Care and Protection of Abrasive Wheels."

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### **Section 9: Physical and Chemical Properties**

<b>Boiling Point:</b>	NA
<b>Vapor Pressure:</b>	NA
<b>Vapor Density:</b>	NA
<b>Specific Gravity:</b>	1.2 – 2.8
<b>Solubility in Water:</b>	Very slightly
<b>Freezing Point:</b>	NA
<b>Melting Point:</b>	NA
<b>pH:</b>	Not relevant
<b>Physical Form:</b>	Solid
<b>Color:</b>	Various, mostly light gray to black
<b>Odor:</b>	None

### **Section 10: Stability and Reactivity**

<b>Stability (Conditions to Avoid):</b>	This is a stable material. Avoid overspeed and unsafe use conditions.
<b>Incompatibility (Specific Materials to Avoid):</b>	Avoid strong acids and bases.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Hazardous Decomposition:</b>	Dusts are generated in use. In most cases, dusts from the work piece will be significantly greater than from the grinding wheel. Coolants may produce other decomposition products.

### **Section 11: Toxicological Information**

No Information Available

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## **Section 12: Ecological Information**

No Information Available

## **Section 13: Disposal Considerations**

Dispose of in accordance with local, state and federal regulations.

## **Section 14: Transport Information**

Grinding wheels are not a DOT hazardous material.

## **Section 15: Regulatory Information**

This product does not contain and was not manufactured with any Ozone Depleting Chemicals. This product is not subject to SARA 313 reporting.

## **Section 16: Other Information**

The information and recommendations set forth are taken from sources believed to be accurate. Radiac Abrasives, Inc. makes no warranty with respect to the accuracy of this information or the suitability of these recommendations, assumes no liability to any user thereof. It is the responsibility of the user to investigate and understand pertinent sources of information to comply with all laws and procedures applicable to the safe use and handling of the product and to determine the suitability of the product for its intended use.