




SAFETY DATA SHEET

Section 1 Identification

| | |
|--------------------------------------------------------------------|-------------------------------------------------------------------|
| Name: Vitrified Bond Diamond or Cubic Boron Nitride | Common Name: Vitrified Bond Diamond or Cubic Boron Nitride |
| Manufacturer: Continental Diamond Tool Corp | Address: 1221 Hartzell St. |
| City: New Haven | State: Indiana |
| Postal Code: 46774 | Contact: Raymond Viggiano |
| Emergency Phone: 260-493-1294 Phone: 260-493-1294 | Recommended Use: Super Abrasive Tooling |

Section 2: Hazard Identification

| |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard Classification: Irritant |
| Signal Word: Warning |
| Hazard Statement: Grinding dust may cause respiratory, skin and/or eye irritation. |
| Pictograms:  |
| Precautionary Statement: Handle with adequate ventilation. See OSHA 29 CFR 1910.92 (ventilation) and 29 CFR 1910.1000 (air contaminants). Use with approved dust respirator (see OSHA 29 CFR 1910.134) |
| Hazards not otherwise classified: N/A |
| Percentage of ingredients with unknown toxicity: none |

Section 3: Composition/Information on Ingredients

| Chemical Name | Common Name / synonym | CAS | REG (Y or N) | Max % |
|-------------------------------------------------------------------------------|-----------------------|------------|--------------|-------|
| Aluminum Oxide | Aluminum Oxide | 1344-28-1 | Y | 60 |
| Silicon Carbide | Silicon Carbide | 409-21-2 | Y | 50 |
| Diamond | Diamond | 7782-40-3 | Y | 60 |
| Glass or Glass/Porcelain | Glass | NA | Y | 40 |
| Ceramic Microspheres | Ceramic | NA | Y | 20 |
| Cubic Boron Nitride | Boron | 10043-11-5 | Y | 60 |
| Note: Listed chemicals may be of the bond system in the usable part of wheel. | | | | |

Section 4: First Aid Measures

| Route of Exposure | Acute Effects | Chronic Effects | Recommended Medical Attention |
|-----------------------------------------------|--------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------|
| Inhalation(during grinding) | Coughing, shortness of breath | May affect breathing capacity | Remove to fresh air, artificial respiration as needed, obtain medical assistance |
| Eyes(during grinding) | Dusts may irritate eyes | | Wash with large amounts of water obtain first aid and medical assistance if needed |
| Skin(during grinding) | Some may experience skin irritation from dust | | Wash affected area with soap and water, Obtain medical assistance |
| Ingestion(during grinding) | No known adverse effects but ingestion not recommended | | Obtain medical assistance |
| Other potential Health Risks(during grinding) | The grinding process may create elevated sound levels which may affect hearing | | Obtain medical assistance |

Section 5: Fire Fighting Measures

| |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable extinguishing material: Any media appropriate for the surrounding fire. |
| Extinguishing material not suitable: |
| Hazards created from chemical burning: |
| Special protective equipment or precautions for firefighters: Fire fighters should wear goggles and self-contained breathing apparatus to avoid inhalation of smoke or vapors. |

Section 6: Accidental Release Measures

| |
|----------------------------------------------------------------------|
| Personal precaution/protective equipment during clean up from spill: |
| Emergency procedures during clean up: None |
| Methods and materiel for containment: |
| Clean up procedure: Normal housekeeping clean up procedures |

Section 7: Handling and Storage

| |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautions for safe handling: 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. Always use a guard. Refer to ANSI B7.1 for the "Safety Requirements for the Use, Care and Protection of Abrasive Wheels". Handle with adequate ventilation. |
| Safe hygiene practices: Avoid breathing dust. Avoid skin and eye contact with grinding dust. Use in well ventilated area. |
| Conditions for safe storage: 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 Standard B7.1, 2, 3. |

Section 8: Exposure Controls/Personal Protection

| Chemical | OSHA/PEL | ACGIH/TLV | NIOSH |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|
| Aluminum Oxide | 15mg/m3 | 10mg/m3 | NA |
| Silicon Carbide | 15mg/m3 | 10mg/m3 | 10mg/m3 |
| Diamond | 15mg/m3 | 10mg/m3 | NA |
| Glass or Glass/Porcelain | 15mg/m3 | 10mg/m3 | 5mg/m3 |
| Ceramic Microspheres | NA | NA | NA |
| Cubic Boron Nitride | 3mg/m3 | 3mg/m3 | 3mg/m3 |
| Respiratory Protection | Use NIOSH approved respirators as required to maintain exposure below Threshold Limit Values (TLV/TWA). See OSHA 29 CFR 1910.134. | | |
| Skin Protection: | Leather, cloth, rubber or vinyl gloves desired by user. | | |
| Eye Protection: | Safety goggles or safety glasses with side shields are recommended. See OSHA 29 CFR 1910.133 | | |
| Hearing Protection: | See OSHA 29 CFR 1910.215 concerning hearing protection. | | |
| Engineering Controls: | Local exhaust ventilation as necessary to keep dust levels below Threshold Limit Values (TLV/TWA). | | |
| Other Precautions: | Visually inspect all wheels before mounting for possible damage. Do not operate above maximum operation speed. Always use a guard. Refer to ANSI B7.1 for the "Safety Requirements for the Use, Care and Protection of Abrasive Wheels". | | |

Section 9: Physical and Chemical Properties

| | | | | | |
|--------------------------|-------------------------------------|-----------------------------|---------------|------------------------|-------|
| Boiling Point: | NA | Vapor Pressure: | NA | Vapor density | NA |
| Specific Gravity: | 1.2 – 2.8 | Solubility in Water: | Very Slightly | Freezing Point: | NA |
| Melting Point: | NA | pH: | Not relevant | Physical Form: | Solid |
| Color: | Various, mostly light gray to black | Odor: | None | | |

Section 10: Stability and Reactivity

| |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stability (Conditions to be avoid): This is a stable material. Avoid overspeed and unsafe use conditions. |
| Incompatible Materials: (specific materials to avoid) Avoid strong acids and bases. |
| Hazardous Polymerization: Will not occur. |
| Hazardous decomposition products: 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. |

11: Toxicological Information

| Routes of Exposure | Acute Effects | Chronic Effects |
|----------------------------|--------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Inhalation(dusts) | Coughing, shortness of breath | May affect breathing capacity |
| Eyes | Dusts may irritate eyes | |
| Skin | Some may experience skin irritation from dust | |
| Ingestion | No known adverse effects but ingestion not recommended | |
| Other | The grinding process may create elevated sound levels which may affect hearing | |
| Emergency Overview: | Dust may be irritation. May cause delayed lung damage. Low hazard to usual industrial or commercial handling | |
| Chemical | Carcinogen (Y/N) | |
| Aluminum Oxide | N | |
| Diamond | N | |
| Glass or Glass/Porcelain | N | |
| Ceramic Microspheres | N | |
| Cubic Boron Nitride | N | |

Section 12: Ecological Information (non-mandatory)

Section 13: Disposal Consideration (non-mandatory)

Section 14: Transport Information (non-mandatory)

Section 15: Regulatory Information (non-mandatory)

Section 16: Other