355 State Street, St. Paul, Minnesota 55107

Phone: 1-800-328-4655 Fax: 651-227-1793

# Safety Data Sheet

Revision Date: 8/21/15

#### SECTION 1 - Identification

#### 1.1 Product Identifier

Burrs, Type 187-B (Cemented Tungsten Carbide with Cobalt Binder)

## 1.2 Recommended use and Restrictions on use

Metal Working

## 1.3 Supplier's details

MANUFACTURER'S NAME: Viking Drill & Tool, Inc. ADDRESS: 355 State St., St. Paul, MN. 55107 TELEPHONE #: 651-227-8911

#### 1.4 Emergency telephone number

651-268-5111

# SECTION 2 - Hazard Identification

#### 2.1 Hazard Classification

• This product is considered to be an article, and should not present a health hazard during normal use.

#### 2.2 Label Elements

 Signal Word: n/a Symbols: n/a Pictograms: n/a

#### 2.3 Hazards not otherwise classified

We do not consider this product in the form it is sold to constitute a physical hazard or a health hazard. Subsequent operations such as grinding, melting, welding, cutting or processing in any other fashion may produce potentially hazardous dust or fumes which can be inhaled, swallowed or come in contact with the skin or eyes.

#### **Effects of Overexposure:**

Inhalation: Dust from grinding can cause irritation of the nose and throat. It also has the potential for causing transient or permanent respiratory disease including occupational asthma and interstitial fibrosis in a small percentage of exposed individuals. It is reported that cobalt dust is the most probable cause of such respiratory diseases. Symptoms include productive cough, wheezing, shortness of breath, chest tightness and weight loss. Interstitial fibrosis (lung scarring) can lead to permanent disability or death.

Skin Contact: Can cause irritation or an allergic skin rash due to cobalt sensitization.

Eye Contact: Can cause irritation.

Ingestion: No information is available regarding ingestion that may have occurred in the tungsten carbide industry. Reports outside the industry suggest that ingestion of significant amounts of cobalt has the potential for causing blood, heart and other organ problems.

## SECTION 3 - Composition/Information on Ingredients

Threshold limit values (TLV) for constituent elements

CONSTITUENT ELEMENT	Percent by Weight	CAS NO.	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
Tungsten Carbide (limits for Tungsten dust)	67.0-97.6%*	12070-12-1		5 mg/m <sup>3</sup>
Cobalt	2.4-27.0%*	7440-48-4	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Tantalum Carbide (limits for Tantalum dust)	0.0-10%*	12070-07-04	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Chromium Carbide (limits for Chromium (+3)	0.0-5.1%*	12012-35-0	1 mg/m <sup>3</sup>	.05 mg/m <sup>3</sup>
Vanadium Carbide	0.0-5.0%*	12070-10-9	None	None
Titanium	0-30%*	12070-08-5	None	None
Niobium Carbide	0-10%*	12011-99-3	None	None

<sup>\*</sup>Depends on grade specifications

#### SECTION 4 - First Aid Measures

#### Description of first aid measures

PRIMARY ROUTES OF ENTRY: EMERGENCY FIRST AID:

Inhalation Remove to fresh-air, if condition continues-consult physician.

Eye Contact Flush well with running water to remove particulate. Get medical attention.

Skin Contact Brush off excess dust. Wash area with soap and water.

Ingestion Seek medical help if large quantities of material have been ingested.

#### SECTION 5 - Fire-fighting Measures

FLASH POINT: NONE FIRE POINT: NONE

Hard cemented Tungsten Carbide Product is not a fire hazard. Dusts generated in grinding operations may ignite if allowed to accumulate.

# SECTION 6 - Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ventilate area of spill. Clean up using methods which avoid dust generation such as vacuum (with appropriate filter to prevent airborne dust levels which exceed the PEL or TLV)., wet dust mop or wet clean-up. If airborne dust is generated, use an appropriate NIOSH approved respirator.

# SECTION 7 - Handling and Storage

Sharp edges could cut. Handle with care. Store in clean, cool area, and away from strong oxidizers.

# SECTION 8 - Exposure Controls/Personal Protection

VENTILATION REQUIREMENTS: General – Recommended, Local – As Required

## PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection: If fumes, misting or dust condition occurs and TLV as indicated in Section II is exceeded,

provide NIOSH approved respirators.

Recommended Gloves: As Required

Other Clothing or Equipment: As Required

# SECTION 9 - Physical and Chemical Properties

Boiling Point	NA		NA
Specific Gravity (H2O=1)	11.0 to 15.5	Vapor Pressure	N/A
Vapor Density (Air=1)	NA	Solubility in H2O	Insoluble
% Volatiles by Volume	0	Evaporation (ButylAcetate=1)	N/A
Appearance and Odor	Dark Gray Metal/No Odor	How best monitored	Air Sample

## SECTION 10 - Stability and Reactivity

REACTIVITY: N/A

CHEMICAL STABILITY: Stable

POSSIBILITY OF HAZARDOUS REACTIONS: None

CONDITIONS TO AVOID: None

INCOMPATIBILITY: Contact of dust with strong oxidizers may cause fire or explosions.

HAZARDOUS DECOMPOSITION PRODUCTS: None

## SECTION 11 - Toxicological Information

Contact the address listed on the first page of the Safety Data Sheet for toxicological information on the material and its components

#### SECTION 12 - Ecological Information

N/A

#### SECTION 13 - Disposal Considerations

WASTE DISPOSAL METHOD: Solids - Sale as Scrap, Dust, Etc. - Follow Federal, State and Local Regulations

# SECTION 14 - Transport Information

N/A

#### SECTION 15 - Regulatory Information

N/A

#### SECTION 16 - Other Information

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Maintain good housekeeping procedures to prevent dust accumulation during grinding. Avoid dust inhalation and direct skin contact with dust.

OTHER PRECAUTIONS: Clean up using methods which avoid dust generation such as vacuum (with appropriate filter to prevent airborne dust levels which exceed the PEL or TLV), wet dust mop or wet clean-up. If airborne dust is generated, use an appropriate NIOSH approved respirator.

Wash hands thoroughly after handling, before eating or smoking. Wash exposed skin at the end of work shift. Do not shake clothing, rags or other items to remove dust. Dust should be removed by washing or vacuuming (with appropriate filters) the clothing, rags or other items.

Periodic medical examinations are recommended for individuals regularly exposed to dust or mist.