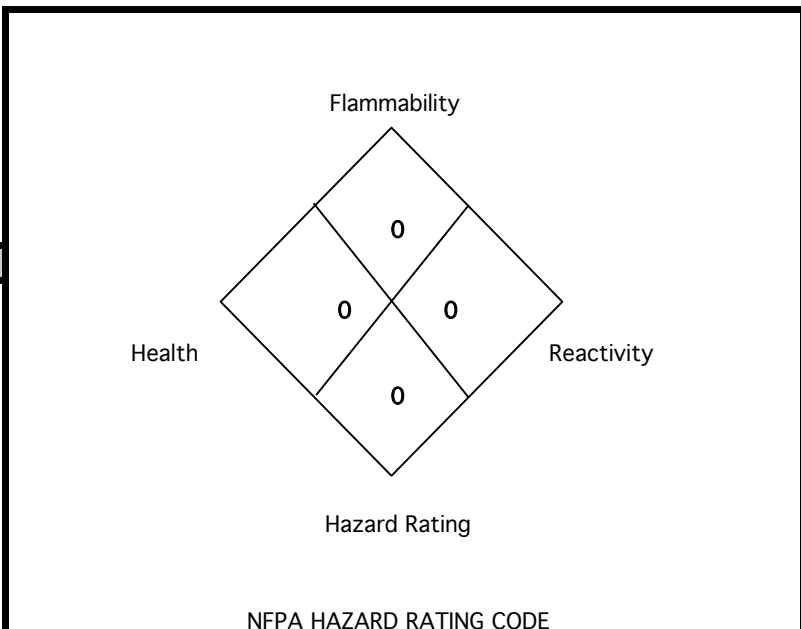


# Material Safety Data Sheet

Used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200



## SECTION I - NAME AND PRODUCT

**Company Name:** Flexovit Abrasives  
**Address:** 1305 Eden-Evans Road  
 Angola, NY 14006  
**Phone:** 800-689-3539

**Date Updated:** 4/1/06

**Product:** Diamond Blades & Core Bits

## SECTION II - COMPOSITION

Ingredient	Hazardous Form	% By Weight	OSHA Regulate	Cas #	OSHA PEL	ACGIH TLV	NIOSH REL	Carcinogen
<b>Core:</b>								
Iron	as iron oxide fume	>95	N/A	7439-89-6	10.0 mg/m <sup>3</sup>	N/A	N/A	No
<b>Segment:</b>								
Chromium	as metal	0-1	N/A	7440-47-3	0.5 mg/m <sup>3</sup>	N/A	0.5 mg/m <sup>3</sup>	Yes
Cobalt	as dust/fume	0-99	N/A	7440-48-4	0.1 mg/m <sup>3</sup>	N/A	0.05 mg/m <sup>3</sup>	Yes
Copper	as copper dust	0-80	N/A	7440-50-8	1.0 mg/m <sup>3</sup>	N/A	1.0 mg/m <sup>3</sup>	No
Diamond		2-20	N/A	7782-40-3	N/A	N/A	N/A	No
Iron	as iron oxide fume	0-60	N/A	7439-89-6	10.0 mg/m <sup>3</sup>	N/A	N/A	No
Manganese	as manganese	0-5	N/A	7439-96-5	5.0 mg/m <sup>3</sup>	N/A	1.0 mg/m <sup>3</sup>	No
Molybdenum	soluble moly compound	0-6	N/A	7439-98-7	15.0 mg/m <sup>3</sup>	N/A	5.0 mg/m <sup>3</sup>	No
Nickel	as nickel fume	0-60	N/A	7440-02-0	1.0 mg/m <sup>3</sup>	N/A	.015 mg/m <sup>3</sup>	Yes
Phosphorous	as phosphorous	0-2	N/A	7723-14-0	0.1 mg/m <sup>3</sup>	N/A	0.1 mg/m <sup>3</sup>	No
Silver	as metal dust/fume	0-10	N/A	7440-22-4	0.01 mg/m <sup>3</sup>	N/A	0.01 mg/m <sup>3</sup>	No
Tin	as oxide	0-20	N/A	7440-31-5	2.0 mg/m <sup>3</sup>	N/A	2.0 mg/m <sup>3</sup>	No
Titanium	as dust/fume	0-1	N/A	7440-32-6	15.0 mg/m <sup>3</sup>	N/A	N/A	No
Tungsten	as tungsten dust	0-30	N/A	7440-33-7	15.0 mg/m <sup>3</sup>	N/A	5.0 mg/m <sup>3</sup>	No
Tungsten Carbide	as cobalt/nickel dust	0-70	N/A	12070-12-1	5.0 mg/m <sup>3</sup>	N/A	.05/0.015 mg/m <sup>3</sup>	Yes

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State	Solid	Boiling Point	N/A	Specific Gravity (H2O=1)	>7
Vapor Pressure (mm HG)	N/A	Freezing Point	N/A	Odor Threshold	N/A
Vapor Density (Air=1)	N/A	Melting Point	>1200 F (630 C)	pH	N/A
Solubility in Water	N/A	% Volatile	N/A	Evaporation Rate	N/A
Odor/Appearance	Metallic Appearance:No Odor		Coefficient of Water/Oil Distribution		N/A

## SECTION IV - FIRE AND EXPLOSION DATA

Means Of Extinction	N/A	Lower And Upper Explosion Limits	N/A
Flammable Limits	N/A	Special Fire Fighting Procedures	N/A

Flash Point	N/A	Unusual Fire or Explosion Hazards	N/A
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### SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Reacts with strong acids to form hydrogen gas

Hazardous Decomposition Products: Metallic fumes or dust may be produced during welding, brazing, grinding and machining.

### SECTION VI - HEALTH HAZARD DATA

These products in their manufactured state do not present an inhalation or contact hazard. Operations such as grinding, cutting, welding or brazing may release fumes and dust, which may present health hazards. Proper protective equipment is recommended (see Section VIII). Dust generated during the use of diamond saw blades or core bits is normally from the material being cut. Consult the MSDS for the material being cut for further information.

#### WATCH FOR EFFECTS OF OVEREXPOSURE:

**Acute**-Dust or fumes may cause irritation to eyes, nose, or throat. Overexposure to dusts generated during use can cause coughing or wheezing and shortness of breath. Exposure to welding or brazing fumes may leave a metallic taste in mouth. Inhalation of metal oxides produced in welding or brazing may produce flu-like symptoms commonly known as "metal fume fever".

**Chronic**- Repeated overexposure to dusts and fumes generated during use can create the health hazards described below:

**Cobalt** (metal as dust and fume): Lung inflammation and damage, and diffuse pulmonary fibrosis from inhalation.

The National Toxicology Program (NTP) has identified Cobalt as a potential carcinogen.

**Copper** (dust and fume, Cu): Inhalation may cause nose and throat irritation and prolonged contact dermatitis.

**Chromium** (metal): May enter and affect the body through inhalation, ingestion, or skin contact. The NTP & IARC (International Agency for Research on Cancer) report they possess sufficient evidence to establish a causal relationship for human cancer from chromium.

**Iron** (oxide as dust and fume): Inhalation of iron oxide fume or dust may result in a condition known as siderosis.

**Manganese** (compounds and fume as Mn): Inhalation may result in symptoms such as headache, restlessness, neurological dysfunction, or muscular weakness.

**Nickel** (metal and other compounds as Ni): Inhalation may result in inflammation of the respiratory tract and fever. The IARC and the NTP have identified nickel as a potential carcinogen.

**Silver** (metal dust and soluble compounds as Ag): May cause irritation to eyes, nasal, septum, throat, and skin, and may cause intestinal disturbance.

**Tin** (metallic flake, powder): May cause eye, skin, and respiratory system irritation.

**Tungsten Carbide**: Tungsten carbide may contain trace amounts of Cobalt or Nickel. The IARC and the NTP have identified tungsten carbide as a potential carcinogen.

**Silica** (airborne particles of respirable size, not a direct component of product): During the use of this product the generation of silica, crystalline (airborne particles of respirable size) may be released from the material being cut. Silica, Crystalline (airborne particles of respirable size) are known to the State of California to cause cancer and/or birth defects or other reproductive harm.

**California Proposition 65 Notice**: This product contains a chemical or chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm. The use of this product can cause the exposure to a chemical or chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

### CALIFORNIA OSHA INFORMATION

Ingredient	Hazardous Form	% By Weight	Cas #	OSHA PEL	CA Proposition 65
Chromium	as metal	0-1	7440-47-3	0.5 mg/m <sup>3</sup>	No
Cobalt	as dust/fume	0-99	7440-48-4	0.1 mg/m <sup>3</sup>	Yes
Copper	as copper dust	0-80	7440-50-8	1.0 mg/m <sup>3</sup>	No
Diamond		2-20	7782-40-3	N/A	No
Iron	as iron oxide fume	0-60	7439-89-6	10.0 mg/m <sup>3</sup>	No
Manganese	as manganese	0-5	7439-96-5	5.0 mg/m <sup>3</sup>	No

### CALIFORNIA OSHA INFORMATION

Molybdenum	soluble moly compound	0-6	7439-98-7	15.0 mg/m <sup>3</sup>	No
Nickel	as nickel fume	0-60	7440-02-0	1.0 mg/m <sup>3</sup>	Yes
Phosphorous	as phosphorous	0-2	7723-14-0	0.1 mg/m <sup>3</sup>	No

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Route(s) of Entry	Signs and Symptoms of Exposure	Emergency & First-Aid Procedures
Inhalation	Overexposure to dusts generated during use can cause coughing or wheezing and shortness of breath. May also leave a metallic taste in mouth or produce flu-like symptoms. Repeated overexposure can create serious health problems.	Seek medical attention in case of over-exposure.
Skin	Irritation or rash may develop.	Thoroughly wash affected area with soap and water. If symptoms persist, seek medical attention.
Eyes	Irritation may occur.	Flush with copious amounts of water. If irritation persists, seek medical attention.

#### SECTION VII- STORAGE HANDLING AND USE PROCEDURES

Spill or Leak Procedures: N/A

Waste Disposal Methods: Disposal must comply with applicable federal, state, and local disposal laws.

#### SECTION VIII- CONTROL MEASURES

Protection	Requirements and Referrals
Respiratory	Use of an appropriate NIOSH-approved respirator for operators and bystanders is mandatory if airborne concentrations exceed the appropriate OSHA PEL and TLV levels and is always highly recommended. See OSHA 29CFR 1910.1000 -air contaminants; 1910.134-respirators.
Ventilation	Use of adequate ventilation and/or water spray mist to reduce generated dust concentration is recommended wherever possible. See OSHA 29CFR 1910.94-ventilation.
Protective Gloves	Mandatory
Eye Protection	Mandatory
Hearing Protection	Mandatory
Hygienic Practices	Good hygiene practice is mandatory
Other	N/A

#### COMPANY USE

The information and recommendations set forth herein are taken from sources and references believed to be accurate and complete as of the date hereof. However, Flexovit® U.S.A., Inc. makes no expressed or implied warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.