

# FLEXOVIT USA INC.

## SAFETY DATA SHEET

### SECTION 1 - Identification of the Product and Company

- 1.1 Product Name: Reinforced Resinoid Bonded Abrasive Wheel
- 1.2 Product Use: For material removal. See ANSI B7.1-2017
- 1.3 Company Details: **Flexovit Abrasives Inc.**  
Address: 1305 Eden-Evans Center Rd.  
Angola, NY 14006  
Phone: 1-716-549-5100  
Fax: 1-716-549-7932

### SECTION 2 - Hazard Information

#### 2.1 Precautionary statements

Wear Respirator, eye protection, and protective clothing when using product  
Product will produce sparks and debris when in use, avoid using product near reactive or flammable substances or electrical equipment  
Discard if product comes in contact with water

#### 2.2 Description of Hazards

Wheel dust is a respiratory irritant  
Wheel dust and fiberglass reinforcement is a skin irritant

##### **Fiberglass**

Fiberglass in wheels have a diameter larger than 10 um and are considered non-respirable.

##### **Phenol-formaldehyde Coating**

Chronic health effect: Excessive exposure can cause skin sensitization and decreased lung capacity

Eye Contact: Can cause eye irritation

Skin Contact: Can cause skin irritation

Inhalation can cause irritation to mucous membranes and respiratory tracts.

Ingestion: Coating contains cryolite. Large doses of cryolite can cause severe nausea, vomiting, diarrhea, abdominal burning and cramp-like pains.

**SECTION 3 - Composition**

<u>Ingredient</u>	<u>Formula</u>	<u>% Weight</u>	<u>Cas #</u>
Aluminum Oxide	Al <sub>2</sub> O <sub>3</sub>	60 - 80	1344-28-1
Silicon Carbide	SiC	0-70	409-21-2
Zirconium Oxide	ZrO <sub>2</sub>	0 - 12	1314-23-4
Calcium Hydroxide	Ca(OH) <sub>2</sub>	0-1	1305-62-0
Barium Sulfate	BaSO <sub>4</sub>	0-10	7727-43-7
Iron Sulfide	FeS <sub>2</sub>	0-18	1317-37-9
Alkali Aluminum Fluorides	-	0-15	16984-48-8
Cured Phenolic Resin	-	0 - 15	9003-35-4
Glass Fiber	-	0 - 5	N/A
Steel	-	0.1 - 1	N/A
Carbon Black	-	0-0.1	1333-86-4
Zinc	Zn	NA	7440-66-6

**SECTION 4-First Aid**

**4.1 First Aid for exposure**

Dust Inhalation: Terminate exposure and remove to fresh air. Obtain medical assistance.  
 Ingestion: Obtain medical assistance.  
 Absorption: N/A  
 Skin contact: Terminate exposure and remove to fresh air. Obtain medical assistance.  
 Eye: Flush eyes with water

**4.2 Signs and Symptoms of Exposure**

Acute: May cause coughing and shortness of breath during grinding.  
 Skin irritation.  
 Eye irritation.  
 Chronic: Decreased lung capacity

**SECTION 5 - Fire Fighting Measures**

**5.1 Means Of Extinction:** Water or carbon dioxide  
**5.2 Unusual Fire or Explosion Hazards:** None  
**Flammable Properties:** none  
**5.3 Special Fire Fighting Procedures:** Consult NFPA or CFPA procedures

## SECTION 6 - Accidental Release Measures

Normal clean up procedures should be used if material is released.

Use of gloves to clean up spent wheels is recommended

## SECTION 7- Storage, Handling and Use Procedures

- 7.1 Handling:** Avoid damage to wheel. Do not drop. Do not use a wheel that has been damaged. Always handle in accordance with ANSI B7.1.
- 7.2 Storage:** Avoid excessive temperatures in storage. Store in a dry area. Discard if wheel gets wet.
- 7.3 Use:** Use in accordance with regulations and standards

## SECTION 8- Personal Protective Control Measures

### 8.1 Exposure Limits

Chemical	OSHA PEL	ACGIH TLV
Aluminum Oxide	15 mg/m <sup>3</sup> (5 mg/m <sup>3</sup> respirable)	1 mg/m <sup>3</sup> (as aluminum)
Silicon Carbide	15 mg/m <sup>3</sup> (5 mg/m <sup>3</sup> respirable)	10 mg/m <sup>3</sup> (3 mg/m <sup>3</sup> respirable)
Zirconium Oxide	NA	5 mg/m <sup>3</sup> (as zirconium)
Calcium Hydroxide	15 mg/m <sup>3</sup> (5 mg/m <sup>3</sup> respirable)	5 mg/m <sup>3</sup>
Barium Sulfate	15 mg/m <sup>3</sup> (5 mg/m <sup>3</sup> respirable)	10 mg/m <sup>3</sup>
Iron Disulfide	NA	NA
Fluorides	2.5 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>
Phenolic resin (as phenol)	5 ppm	5 ppm
Fiber Glass	15 mg/m <sup>3</sup> (5 mg/m <sup>3</sup> respirable)	5 mg/m <sup>3</sup>
Carbon black	3.5 mg/m <sup>3</sup>	3.5 mg/m <sup>3</sup>

### 8.2 Personal protection requirements and referrals

- Respiratory:** OSHA/NIOSH approved respirator.  
See OSHA 29 CFR 1910.134/European Standard EN 149
- Ventilation:** Engineering Controls recommended.  
See ANSI Z43.1. Refer to OSHA 29 CFR 1910.94.
- Protective Gloves:** Leather gloves
- Eye Protection:** Protective eyewear such as safety glasses or face shield.  
Refer to OSHA 29 CFR 1910.133.  
Hearing protection such as approved ear muffs or ear plugs.
- Hearing Protection:** Refer to OSHA 29 CFR 1910.95.
- Body Protection:** Leather apron, chaps, or shoe coverings to shield from spark showers in operation.
- Hygienic Practices:** Wash with soap and water after handling and grinding.

## SECTION 9- Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity	2 - 4
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR=1)	N/A	Evaporation Rate (Butyl Acetate=1)	N/A
Solubility in Water	N/A	Appearance	Dark colored solid
Lower And Upper Explosion Limits	N/A	Odor	plastic
Flammable Limits	N/A	Degradation Temperature	~ 800 F (427 C)
Flash Point	N/A		

### SECTION 10 - Stability and Reactivity Data

Avoid excessive moisture and humidity, temperature extremes and contact with acids or solvents

Not incompatible with any materials

No known hazardous reactions will occur

At temperatures exceeding 250° C hazardous or toxic decomposition products may be generated.

### SECTION 11 - Toxicological Data

#### 11 Acute Toxicity Data

<u>Chemical</u>	<u>Route of Exposure</u>	<u>Acute LD50</u>
Aluminum Oxide	oral	>5000 mg/kg (rat)
Zirconium Oxide	oral	>8800 mg/kg (mouse)
Calcium Oxide	oral	> 7340 mg/kg (rat)
Carbon Black	oral	> 8000 mg/kg (rat)

#### 11.2 Toxicological Effects

Dust Inhalation:	Coughing and shortness of breath, decreased lung capacity, aggravation of medical conditions such as asthma or emphysema
Ingestion:	Large quantity consumption can cause stomach pain
Absorption:	N/A
Skin contact:	Grinding wheel may cause abrasions Dust may cause skin irritation
Eye:	Dust or fumes may cause eye irritation
Carcinogenicity:	Cured phenolic resin contains trace amounts of formaldehyde. Formaldehyde is a recognized carcinogen by US HTP
Mutagenicity:	Unknown
Reproductive Effects:	Unknown

### Section 12-Ecological Information

No Data Available

**Section 13-Disposal Considerations**

Dispose in accordance to local and federal regulations

**Section 14-Transport Information**

Not regulated as a hazardous material for transport

**Section 15-Regulatory Information**

**SARA 311/312:** N/A

**SARA 313:** N/A

**Canadian WHIMIS Classification:** N/A

**California Proposition 65:** "WARNING: Dust is created when grinding materials such as metal, ceramics, paint, cement and masonry. Dust created from these processes may contain chemicals known to the state of California to cause cancer or harmful birth defects."

**Section 16-Other Information**

SDS Revision Date: November 2, 2023

Reason for Update: Mandated Update

Preparation By: FlexOvit USA

**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, Brilliant Abrasives 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.