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 USA 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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Formula</th>
<th>% Weight</th>
<th>Cas #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide</td>
<td>Al₂O₃</td>
<td>60 - 80</td>
<td>1344-28-1</td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>SiC</td>
<td>0-70</td>
<td>409-21-2</td>
</tr>
<tr>
<td>Zirconium Oxide</td>
<td>ZrO₂</td>
<td>0 - 12</td>
<td>1314-23-4</td>
</tr>
<tr>
<td>Calcium Hydroxide</td>
<td>Ca(OH)₂</td>
<td>0-1</td>
<td>1305-62-0</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>BaSO₄</td>
<td>0-10</td>
<td>7727-43-7</td>
</tr>
<tr>
<td>Iron Sulfide</td>
<td>FeS₂</td>
<td>0-18</td>
<td>1317-37-9</td>
</tr>
<tr>
<td>Alkali Aluminum Fluorides</td>
<td>-</td>
<td>0-15</td>
<td>16984-48-8</td>
</tr>
<tr>
<td>Cured Phenolic Resin</td>
<td>-</td>
<td>0 - 15</td>
<td>9003-35-4</td>
</tr>
<tr>
<td>Glass Fiber</td>
<td>-</td>
<td>0 - 5</td>
<td>N/A</td>
</tr>
<tr>
<td>Steel</td>
<td>-</td>
<td>0.1 - 1</td>
<td>N/A</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>-</td>
<td>0-0.1</td>
<td>1333-86-4</td>
</tr>
<tr>
<td>Zinc</td>
<td>Zn</td>
<td>NA</td>
<td>7440-66-6</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide</td>
<td>15 mg/m³ (5 mg/m³ respirable)</td>
<td>1 mg/m³ (as aluminum)</td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>15 mg/m³ (5 mg/m³ respirable)</td>
<td>10 mg/m³ (3 mg/m³ respirable)</td>
</tr>
<tr>
<td>Zirconium Oxide</td>
<td>NA</td>
<td>5 mg/m³ (as zirconium)</td>
</tr>
<tr>
<td>Calcium Hydroxide</td>
<td>15 mg/m³ (5 mg/m³ respirable)</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Barium Sulfate</td>
<td>15 mg/m³ (5 mg/m³ respirable)</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Iron Disulfide</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Fluorides</td>
<td>2.5 mg/m³</td>
<td>2.5 mg/m³</td>
</tr>
<tr>
<td>Phenolic resin (as phenol)</td>
<td>5 ppm</td>
<td>5 ppm</td>
</tr>
<tr>
<td>Fiber Glass</td>
<td>15 mg/m³ (5 mg/m³ respirable)</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Carbon black</td>
<td>3.5 mg/m³</td>
<td>3.5 mg/m³</td>
</tr>
</tbody>
</table>

8.2 Personal protection requirements and referrals

Respiratory: OSHA/NIOSH approved respirator.

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

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Route of Exposure</th>
<th>Acute LD₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide</td>
<td>oral</td>
<td>&gt;5000 mg/kg (rat)</td>
</tr>
<tr>
<td>Zirconium Oxide</td>
<td>oral</td>
<td>&gt;8800 mg/kg (mouse)</td>
</tr>
<tr>
<td>Calcium Oxide</td>
<td>oral</td>
<td>&gt; 7340 mg/kg (rat)</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>oral</td>
<td>&gt; 8000 mg/kg (rat)</td>
</tr>
</tbody>
</table>

11.2  Toxological 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

<table>
<thead>
<tr>
<th>SARA 311/312:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA 313:</td>
<td>N/A</td>
</tr>
<tr>
<td>Canadian WHIMIS Classification:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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: September 1, 2020
Reason for Update: Mandated Update
Preparation By: FlexOvit USA

COMPANY USE

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