SECTION 1 - Identification of the Product and Company

1.1 Product Name  Resin Cupstones with and without Steelback
1.2 Product Use  Removal of material various metallic parts such as castings, forgings and weldments.
1.3 Company Details:  Flexovit USA Inc.  see ANSI B7.1-2010
   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 all necessary protective equipment such as:
1. Respirator to prevent dust inhalation
2. Eye and face protection
3. Hearing protection
4. Gloves
5. Other protective items such as heavy duty aprons

Product will produce sparks and debris when in use. Avoid using product near reactive or flammable substances
or electrical equipment.

For products not specifically designed and designated for use in wet environments, do not use wheels that have been
been submerged or substantially saturated with water.

Inspect all products before use to assure that they have not been damaged. Discard damaged wheels.

Use and store all grinding wheels in accord with "ANSI B7.1 Safety Requirements for the Use, Care, & Protection of
Abrasive Wheels".

Fiberglass Reinforcing
The fiberglass used in wheels has a diameter larger than 10 um and is considered non-respirable.

Dust from Grinding
Chronic:  Dust from grinding may cause skin sensitization and airway obstruction.
Eye contact:  Immediately flush eyes with water. Get medical attention if situation persists.
Inhalation:  If dust is inhaled, remove affected person to fresh air. If symptoms persist, get medical attention.

2.2 Description of Hazards

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory irritant</td>
<td>May cause temporary mechanical irritation of the nose, throat and respiratory tract.</td>
</tr>
<tr>
<td>Eye and skin irritant</td>
<td></td>
</tr>
</tbody>
</table>

Hazard Rating

<table>
<thead>
<tr>
<th>Source</th>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### SECTION 3 - Composition

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Formula</th>
<th>% Weight</th>
<th>OSHA Regulated</th>
<th>Cas #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide (non-fibrous)</td>
<td>0-95</td>
<td>No</td>
<td></td>
<td>1344-28-1</td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>0-95</td>
<td>No</td>
<td></td>
<td>409-21-2</td>
</tr>
<tr>
<td>Zirconium Dioxide</td>
<td>0-80</td>
<td>No</td>
<td></td>
<td>1314-23-4</td>
</tr>
<tr>
<td>Calcium Oxide</td>
<td>0-10</td>
<td>No</td>
<td></td>
<td>1305-78-8</td>
</tr>
<tr>
<td>Iron Disulfide</td>
<td>0-20</td>
<td>No</td>
<td></td>
<td>12068-85-8</td>
</tr>
<tr>
<td>Inorganic Florides</td>
<td>0-20</td>
<td>No</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Cured Phenolic Resin</td>
<td>2-15</td>
<td>No</td>
<td></td>
<td>9003-35-4</td>
</tr>
<tr>
<td>Fiber Glass</td>
<td>0-15</td>
<td>No</td>
<td></td>
<td>65997-17-3</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>Trace</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paraffin</td>
<td>0-2</td>
<td>No</td>
<td></td>
<td>8002-74-2</td>
</tr>
</tbody>
</table>

Additionally, there may be steel parts imbedded in the product.

### SECTION 4 - First Aid

#### 4.1 First Aid for exposure

1. **Dust Inhalation:** Remove to fresh air. Obtain medical assistance if necessary.
2. **Ingestion:** Accidental ingestion is unlikely. Obtain medical assistance.
3. **Contact:** Wash affected areas with soap and water. Obtain medical assistance if necessary.
4. **Eye:** Immediately flush eyes with plenty of water. Obtain medical assistance if necessary.

#### 4.2 Signs and Symptoms of Exposure

**Acute Symptoms while grinding:**

1. **Dust Inhalation:** May cause coughing and shortness of breath.
2. **Contact:** Serious skin irritation.
3. **Eye:** Dust may irritate eyes

### SECTION 5 - Fire Fighting Measures

#### 5.1 Means Of Extinction

Use any extinguishing media appropriate for the surrounding fire.

#### 5.2 Unusual Fire or Explosion Hazards

None

#### Flammable Properties

Non-flammable

#### Special Fire Fighting Procedures

Consult NFPA or CFPA procedures

### SECTION 6 - Accidental Release Measures

Normal clean up measures should be used. Use of gloves is recommended.
SECTION 7 - Storage, Handling and Use Procedures

7.1 Handling: Always handle and store grinding wheels in a careful manner. Avoid damage to the wheel. Do not drop. Do not use a wheel that is or might be damaged. Always handle in accord with ANSI B7.1.

7.2 Storage: Avoid excessively high or low temperatures in storage. Store in a dry place. See ANSI B7.1 for more information.

7.3 Use: Always use in accordance with ANSI Z43.1 and OSHA 1910.215. Do not use dropped or damaged wheels. Always use with proper size and type of flange(s). (See ANSI B7.1) Always use machine guards where required by OSHA or ANSI B7.1. Do not use without the machine guard in place. Do not use on grinders that exceed the maximum RPM on the wheel. Use in accord with the safety instructions packed with the product.

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>N/A</td>
<td>10mg/m³</td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Zirconium Dioxide</td>
<td>N/A</td>
<td>10mg/m³</td>
</tr>
<tr>
<td>Calcium Hydroxide</td>
<td>N/A</td>
<td>5mg/m³</td>
</tr>
<tr>
<td>Iron Sulfide</td>
<td>N/A</td>
<td>2mg/m³</td>
</tr>
<tr>
<td>Florides</td>
<td>2.5mg/m³</td>
<td>2.5mg/m³</td>
</tr>
<tr>
<td>Phenolic Resin</td>
<td>5 P.P.M.</td>
<td>5 P.P.M.</td>
</tr>
<tr>
<td>Fiber Glass</td>
<td>15mg/m³</td>
<td>15mg/m³</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>3.5mg/m³</td>
<td>3.5mg/m³</td>
</tr>
<tr>
<td>Paraffin</td>
<td>N/A</td>
<td>2mg/m³</td>
</tr>
</tbody>
</table>

8.2 Personal protection requirements and referrals


Protective Gloves: Properly fitting leather protective gloves.

Eye Protection: Protective eyewear such as safety glasses and face shields. Refer to OSHA 29 CFR 1910.133.

Hearing Protection: Hearing protection such as approved ear muffs or ear plugs. Refer to OSHA 29 CFR 1910.95.

Body Protection: Leather apron, chaps or shoe coverings to shield from heavy spark showers in operation.

Hygienic Practices: Wash with soap and water after handling and grinding.
SECTION 9- Physical/Chemical Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2-4</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg.)</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate=1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Trace</td>
</tr>
<tr>
<td>Appearance</td>
<td>Various shades of a brown solid</td>
</tr>
<tr>
<td>Lower And Upper Explosion Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor</td>
<td>May give off a burning plastic odor in use</td>
</tr>
<tr>
<td>Flammable Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Degradation Temperature</td>
<td>Approx 800F (427°C)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SECTION 10 - Stability and Reactivity Data

Chemical Stability: Stable under normal conditions. Avoid excessive moisture and humidity, temperature extremes and contact with acids or solvents.

Hazardous Polymerization: Hazardous Polymerization will not occur.

Special Decomposition Products: In use, dust and decomposing odors may be generated in most cases. The material removed from workplace part will be significantly greater than the grinding wheel components.

SECTION 11 - Toxicological Data

11.1 Component information

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Short term effects</th>
<th>Long term effects</th>
<th>Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide</td>
<td>skin, respiratory irritation</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>skin, respiratory irritation, eye irritation ingestion causes pain</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Zirconium Oxide</td>
<td>skin, respiratory irritation</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Calcium Hydroxide</td>
<td>vomiting, diarrhea</td>
<td>Contact Dermatitis</td>
<td>No</td>
</tr>
<tr>
<td>Iron Sulfide</td>
<td>skin, respiratory irritation</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Florides</td>
<td>skin, respiratory irritation</td>
<td>Fluorosis</td>
<td>No</td>
</tr>
<tr>
<td>Cured Phenolic Resin</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Glass fiber</td>
<td>skin, respiratory irritation</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>skin, respiratory irritation</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Paraffin</td>
<td>fumes, skin, respiratory irritation</td>
<td>N/A</td>
<td>No</td>
</tr>
</tbody>
</table>

11.2 Route(s) of Entry and symptoms of exposure

- **Dust Inhalation**: Coughing and shortness of breath. Aggravation of existing pulmonary medical conditions.
- **Ingestion**: N/A
- **Absorption**: N/A
- **Skin contact**: Grinding wheel may cause abrasions. Dust may cause skin irritation.
- **Eye**: Dust or fumes may cause eye irritation.
Section 12-Ecological Information

No Data Available

Section 13-Disposal Considerations

Dispose in accord with local and federal regulations

Section 14-Transport Information

Not regulated as a hazardous material for transport

Section 15-Regulatory Information

No Data Available

Section 16-Other Information

SDS Revision Date: September 1, 2017
Reason for Update: Mandated Update
Preparation By: FlexOvit USA

COMPANY USE

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