SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name
Bonded Wheels - Cut Off, Grinding

1.2 Product Use
For grinding and sanding of different kinds of materials. (Abrasives breakdown during use. OSHA classifies this as inert or nuisance dust.)

1.3 Manufacturer or Supplier Details
Company: ARC Abrasives, Inc.
Address: 2131 Corporate Drive, Troy OH 45373
Telephone: (937) 335-5607
Fax: (937) 339-4969
Web: www.arcabrasives.com

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification

2.2 Hazards to Humans
N/A

2.3 Hazards to the Environment
N/A

2.4 Physical or Chemical Hazards
N/A

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemicals vary in composition and are comprised of only some of the ingredients listed below:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Concentration</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide</td>
<td>0-52</td>
<td>1344-28-1</td>
</tr>
<tr>
<td>Silicon Dioxide</td>
<td>0-15</td>
<td>7631-86-9</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>0-50</td>
<td>13646-67-7</td>
</tr>
<tr>
<td>Sodium Oxide</td>
<td>0-15</td>
<td>1313-59-3</td>
</tr>
<tr>
<td>Zirconium Oxide</td>
<td>0-25</td>
<td>1314-23-4</td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>0-15</td>
<td>92843-12-4</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>0-5</td>
<td>1309-37-1</td>
</tr>
<tr>
<td>Cured Resin*</td>
<td>0-40</td>
<td>N/A</td>
</tr>
<tr>
<td>Filler*</td>
<td>0-15</td>
<td>N/A</td>
</tr>
<tr>
<td>Metal Ring</td>
<td>0-15</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(*) Denotes mixture. The specific identity and/or exact concentration of any ingredient is withheld as a trade secret.

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

- **Inhalation**: Remove to fresh air. Apply artificial respiration if necessary. Obtain medical assistance if needed.
- **Ingestion**: If sanding dust is swallowed, seek medical attention.
- **Eye Contact**: Flush eyes thoroughly with water. Seek medical assistance if irritation persists.
- **Skin Contact**: No adverse effects by contact are known. Wash dust from skin with soap and water. Fibers/dust can cause eye and respiratory irritation.

4.2 Most important symptoms and effects, both acute and delayed

Fibers/dust can cause eye and respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Not relevant. Treat symptomatically.
SECTION 5 - FIRE FIGHTING METHODS

5.1 Suitable extinguishable media
Product is non-combustable. Use a firefighting agent such as water or foam, according to your environment.

5.2 Special hazards arising from substance or mixture
There are no inherent hazards associated with this product.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions
Use appropriate PPE when using this product.

6.2 Environmental precautions
Avoid release into the environment.

6.3 Methods for containment or cleanup
Clean up and dispose of with normal clean up procedures.

SECTION 7 - HANDLING AND STORAGE

7.1 Handling
Provide adequate ventilation. Avoid generation of dust. Avoid breathing the dust. Wear appropriate protective equipment. Refer to OSHA’s substance specific standards for additional work practice requirements.

7.2 Storage
Store in a dry location.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Occupational exposure limits

<table>
<thead>
<tr>
<th>&quot;Component&quot;</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide</td>
<td>15mg/m³</td>
<td>10mg/m³</td>
</tr>
<tr>
<td>Silicon Dioxide</td>
<td>15mg/m³</td>
<td>10mg/m³</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>15mg/m³</td>
<td>10mg/m³</td>
</tr>
<tr>
<td>Sodium Oxide</td>
<td>2mg/m³</td>
<td>2mg/m³</td>
</tr>
<tr>
<td>Zirconium Oxide</td>
<td>10mg/m³</td>
<td>5mg/m³</td>
</tr>
<tr>
<td>Silicon Carbide</td>
<td>15mg/m³</td>
<td>10mg/m³</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>15mg/m³</td>
<td>5mg/m³</td>
</tr>
<tr>
<td>Cured Resin</td>
<td>None established</td>
<td>None established</td>
</tr>
<tr>
<td>Filler</td>
<td>None established</td>
<td>None established</td>
</tr>
<tr>
<td>Metal Ring</td>
<td>None established</td>
<td>None established</td>
</tr>
</tbody>
</table>

8.2 Personal protection requirements and referrals

- **Respiratory protection**: As needed, approved dust respiratory OSHA CRF 1910.134.
- **Hand protection**: Wear appropriate gloves to minimize risk of injury to skin from contact with dust, or physical abrasion from grinding or sanding.
- **Eye protection**: Ref. OSHA 29 CRF 1910.133 (Face and Eye Protection).
- **Hearing protection**: As needed, Ref. OSHA 29 CRF 1910.125 (Hearing Protection).
- **Body protection**: As needed.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Appearance

- **Form**: Solid
- **Color**: Varies
- **Odor**: No data available
- **Odor threshold**: No data available
- **pH value**: No data available
- **Melting/freezing point**: No data available
- **Initial boiling point**: No data available
- **Flash point/range**: No data available
- **Evaporation rate**: No data available
- **Flammability**: No data available
- **Explosion limits**: No data available
- **Vapor pressure**: No data available
SECTION 9 (Continued)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
<tr>
<td>Additional information</td>
<td>No data available</td>
</tr>
</tbody>
</table>

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

This product is not considered to be reactive under normal conditions.

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reaction

Not known.

10.4 Conditions to avoid

Not known.

10.5 Incompatible materials

Not known.

10.6 Hazardous decompositions/products

Not known.

Under normal usage, hazardous decomposition of products are not expected.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Inhalation

Dust from grinding, sanding, or machining may cause irritation of the respiratory system. Signs or symptoms include cough, sneezing, nasal discharge, headache, hoarseness, nose pain, and throat pain.

11.2 Eye contact

Corneal abrasion, pain, redness, and tearing may be signs or symptoms from mechanical eye irritation. Dust created by grinding, sanding, or machining can also cause eye irritation.

11.3 Skin contact

Mechanical skin irritation. Signs or symptoms include abrasion, redness, pain, and itching.

11.4 Ingestion

No known health effects.

11.5 Carcinogenicity

None of the components are listed as a potential carcinogen by OSHA, NTP, or IARC.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Ecological information

It is not expected that this product is hazardous to the environment. Ecotoxicity data is not available for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste disposal method

Dispose of in accordance with all applicable local, state, and federal regulations. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

SECTION 14 - TRANSPORT INFORMATION

14.1 Transportation information

This product is not regulated per the U.S. DOT, IATA, TDG, or IMO.

SECTION 15 - REGULATORY INFORMATION

15.1 Hazard categories

None

15.2 Safety, health and environmental regulations for the substance

This product is an article as defined by TSCA (EPA US) regulations, and is exempt from TSCA inventory listing requirements.
### SECTION 16 - OTHER INFORMATION

#### 16.1 Disclaimer/Statement of Liability
The information provided in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. This information, and the recommendations regarding the application and end use of this product, are given in good faith based on current knowledge and test data. ARC ABRASIVES makes no warranty with the respect to the accuracy of this information or the suitability of these recommendations, and assumes no liability to any user thereof. It is the user's responsibility to determine if this product is fit for a particular purpose, and suitable for the user's method of use and/or application.

#### 16.2 Date Created
10/15/2016

#### 16.3 Revision Number
01

#### 16.4 Revision Date
10/15/2016