This Material Safety Data Sheet for Silicone Carbide Rubber Bonded Abrasive Discs, Wheels & Points covers all of the items listed below:

1. All Rubber Wheel Items
2. Rubber Medium Wheels
3. Rubber Clasp Polisher Items
4. Ultra Thin Discs
5. Veri Thin Discs
6. Ultra Flex
7. Separating Discs
8. Knife Edge Wheels
9. Mizzy Regular Heatless Wheels

See attached sheets for ingredients that may be contained in the above products.
Grinding Wheel:
A wheel in which abrasive particles are embedded into, and held together by, a matrix or bond.

Purposes:
- Remove material (Mounted Stone, Mizzy Heatless Wheel)
- Cut material (Cutoff Wheels, Red Flash Discs and Ultra-Thin)
- Finish (polish)

Bond Types:
- Vitrified Inorganic Bonds
- Oxichloride
- Resin Organic Bonds
- Rubber

Rubber Grades:
- Soft Rubber: Pliable, i.e. Rubber Wheels, Kegold Wheels, Clasp Polishers

Abrasive Types:
- Aluminum Oxide: (red, brown, white) Primarily used on metallics
- Silicon Carbide: (black, green) Primarily used on non-metallics

Contamination:
Silicon carbide abrasive is non-contaminating – cannot cause bubbles. The danger of contamination today is practically negligible since firing is done in a vacuum.

Abrasive Grit Size:
- Medium – 90 to 150
- Fine – 180 to 240
- X Fine – 280 – 320

Operating Speeds:
Wheels are rated in Surface Feet Per Minute (SFM) which is converted to Revolutions Per Minute (RPM).

Rating factors are:
- Diameter
- Bond Type
- Overhang (mounted & unmounted points)

All Keystone items 1 ½” diameter and less are rated at 30,000 RPM. Rubber points are rated at 30,000 RPM with a ½” overhang or less.
**Section 1 – Identification of the Substance/Preparation and of the Company/Undertaking**

**Product Name:** SILICONE CARBIDE RUBBER BONDED ABRASIVE WHEELS, DISCS & POINTS

**Chemical Name:**

**Family:** Abrasive Products inc: All Rubber Wheel items, Rubber Clasp Polisher items, Ultra Thin Discs, Veri Thin Discs, Ultra Flex, Separating Discs, Muzzy Regular Heatless and Knife Edge Wheels

**Product Use:**

**Product #:** -- Various

**Manufacturer:** Keystone Industries
616 Hollywood Ave
Cherry Hill, NJ 08002

**Emergency Phone Numbers:** (800) 535-5053

**Information Contacts:** (856) 663-4700

**MSDS Initial Approval Date:** July 2002

**MSDS Prepared by:** S.Roemer/RMP

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**Section 2 - Composition/Information on Ingredients**

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS Numbers</th>
<th>EINECS#</th>
<th>INCI Name</th>
<th>Exposure Limits</th>
<th>Carcinogen %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicone Carbide</td>
<td>409-21-2</td>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Iron Oxide</td>
<td>1309-37-1</td>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Titanium Oxide</td>
<td>13463-67-7</td>
<td></td>
<td></td>
<td>15 mg/m³</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Acrylonitrile</td>
<td>107-13-1</td>
<td></td>
<td></td>
<td>&gt; 1 ppm</td>
<td></td>
</tr>
<tr>
<td>Butadiene</td>
<td>106-99-0</td>
<td></td>
<td></td>
<td>&gt; 0.02 ppm</td>
<td></td>
</tr>
<tr>
<td>Cashew, nutshell liquid, polymer with formaldehyde and phenol</td>
<td>67700-42-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hazard Symbols:** Risk Phrases: Safety Phrases

**Section 3 - Hazards Identification**

**EMERGENCY OVERVIEW**

This information is based on findings from related or similar materials.

- This product, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product’s directions for use may affect the performance of the product and may present potential health and safety hazards.

**Primary Route of Entry**

- Eyes, inhalation

- Dust may irritate eyes.

- Some may experience skin irritation from dust.

- No known adverse effects but, ingestion not recommended.

- Acute: Coughing, shortness of breath. Chronic: May affect breathing capacity.

- Grinding may create elevated sound levels which may affect hearing.

**Sub-Chronic Effects**

**NOTE:** Refer to Section 11, Toxicological Information for Details

**Section 4 - First Aid Measures**

**First Aid for Eye**

Wash with large amounts of water. Obtain first aid and medical assistance if needed.

**First Aid for Skin**

Wash affected areas with soap and water.

**First Aid for Inhalation**

Remove person to fresh air. Apply artificial respiration as needed. Obtain medical assistance.

**First Aid for Ingestion**

Obtain medical assistance.

**Section 5 - Fire Fighting Measures**

<table>
<thead>
<tr>
<th>Flash Point (°F/°C)</th>
<th>Flammable Limit (vol%)</th>
<th>Auto-ignition Temperature (vol%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>LEL: N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Revised Date:** 11/15/06 | **Replaces Date:** 7/2002
**Section 6 - Accidental Release Measures**

- Spill or Release Procedures: Normal clean-up procedures

**Section 7 - Handling and Storage**

- Handling: Normal use – handle with adequate ventilation
- Storage: Normal dry storage
- Explosion Hazard: No applicable information found

**Section 8 - Exposure Controls / Personal Protective Equipment**

**Engineering Controls**

**Personal Protective Equipment**

**General**
- Local exhaust and ventilation recommended.

**Eye/ Face Protection**
- Recommended. See OSHA 29 CFR 1910.133 – Face and Eye Protection

**Skin Protection**
- Protective gloves as desired by user.

**Respiratory Protection**
- As needed. For approved dust respirators, see OSHA 29 CFR 1910.134 – Respiratory Protection.

**Other Protective Clothing or Equipment**

**Section 9 - Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid, coated abrasive product</td>
</tr>
<tr>
<td>Odor &amp; Odor Threshold</td>
<td>May produce odor in use.</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Specific Gravity (H₂O = 1)</td>
<td>2 - 4</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>% Volatile</td>
<td>No applicable information found</td>
</tr>
<tr>
<td>Boiling Point/ Freezing Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td></td>
</tr>
<tr>
<td>Octanol/Water Partitioning Coefficient Log Po/w</td>
<td>No applicable information found</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg):</td>
<td></td>
</tr>
<tr>
<td>Vapor Density (AIR = 1)</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>No applicable information found</td>
</tr>
<tr>
<td>Ignition</td>
<td>Slight</td>
</tr>
<tr>
<td>Solubility In Water</td>
<td></td>
</tr>
<tr>
<td>Flash Point °F/°C</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammable Limit (vol%)</td>
<td>LEL – N/A</td>
</tr>
<tr>
<td>Auto-ignition Temperature (vol%)</td>
<td>UEL – N/A</td>
</tr>
</tbody>
</table>

**Section 10 - Stability and Reactivity**

- Stability: Stable
- Incompatibility (Materials to Avoid): No applicable information found
- Hazardous Decomposition Products: Dust is generated in use. In most cases, the material removed from the work piece will be significantly greater than the grinding wheel components.
- Hazardous Polymerization: Will not occur
- Conditions to Avoid: No applicable information found

**Section 11 - Toxicological Information**

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral Toxicity</td>
<td></td>
</tr>
<tr>
<td>Acute Dermal Toxicity</td>
<td></td>
</tr>
<tr>
<td>Acute Inhalation Toxicity</td>
<td></td>
</tr>
<tr>
<td>Irritation - skin</td>
<td></td>
</tr>
<tr>
<td>Irritation - Eye</td>
<td></td>
</tr>
<tr>
<td>Sensitization</td>
<td>Mutagenicity</td>
</tr>
<tr>
<td>Sub-chronic Toxicity</td>
<td></td>
</tr>
</tbody>
</table>
No toxicological information determined.

**Section 12 - Ecological Information**

Ecotoxicological Information

<table>
<thead>
<tr>
<th>Acute Toxicity To Fish</th>
<th>Acute Toxicity to Invertebrates</th>
<th>Acute Toxicity to Algae</th>
<th>Bioconcentration</th>
<th>Toxicity to Sewage Bacteria</th>
</tr>
</thead>
</table>

No ecotoxicological information determined.

**Chemical Fate Information**

Biodegradability
Chemical Oxygen Demand

No chemical fate information determined

**Environmental Fate Information**

**Section 13 - Disposal Considerations**

Standard landfill methods consistent with applicable Local, State and Federal laws.

**Section 14 - Transport Information**

Proper Shipping Name: Not regulated
Identification Number:
Marine Pollutant:
Special Provisions:
Emergency Response Guidebook (ERG) #:

**Section 15 - Regulatory Information**

**US Federal Regulations**

Clean Air Act: HAP/ODS

Clean Water Act:

FDA: Food Packaging Status

Occupational Safety and Health Act
RCRA
SARA Title III: Section 302 (TPQ)
SARA Title III: Section 302 (RQ)
SARA Title III: Section 311-312: Fire hazard – no Pressure hazard – no Reactivity hazard – no Immediate hazard - yes Delayed hazard – no
SARA Title III: Section 313: None
TSCA Section 8(b): Inventory:
TSCA Significant New Use Rule:

**State Regulations**

CA Right-to-Know Law:
California No Significant Risk Rule:
MA Right-to-Know Law:
NJ Right-to-Know Law:

Revised Date: 11/15/06 | Replaces Date: 7/2002
**Section 16 - Other Information**

**Hazard Rating System (Pictograms)**

<table>
<thead>
<tr>
<th>NFPA:</th>
<th>HMIS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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