**MATERIAL SAFETY DATA SHEET**

This Material Safety Data Sheet (MSDS) complies with the requirements of OSHA’s Hazard Communication Standard.

**ALUMINUM OXIDE RESIN BONDED GRINDING WHEEL**

**SECTION 1 – PRODUCT IDENTIFICATION**

**Product Name/Class:** Aluminum Oxide Resin Bonded Grinding Wheel  
**Product Number:** 004026  
**Manufacturer:** Radnor Welding Products 259 N. Radnor-Chester Road Suite 100 Radnor, PA 19087-5283

**SECTION 2 – HAZARDOUS INGREDIENTS**

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS Number</th>
<th>% By Weight</th>
<th>ACGIH TLV</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide, Non-fibrous</td>
<td>1344-28-1</td>
<td>90 - 95</td>
<td>10 MG/M³</td>
<td>15 MG/M³</td>
</tr>
<tr>
<td>Cured Phenol Formaldehyde Resin</td>
<td>9003-35-4</td>
<td>3 - 6</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Fiberglass</td>
<td>65997-17-3</td>
<td>1 - 3</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Iron Disulfide</td>
<td>12068-85-8</td>
<td>1 - 3</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

**ND = No data available.**

**SECTION 3 – PHYSICAL CHARACTERISTICS**

- **Boiling Point:** N/A
- **Vapor Pressure (mm Hg):** N/A
- **Melting Point:** N/A
- **Evaporation Rate (Butyl Acetate=1):** N/A
- **Appearance and Odor:** Solid article. Odorless

**SECTION 4 – FIRE and EXPLOSION HAZARD DATA**

- **Respiratory Protection:** Use respirator for fume and dust.
- **Eye Protection:** Always wear eye protection during sanding or grinding operations.
- **Other Protective Clothing or Equipment:** Use of this product may create elevated sound levels. Hearing protection should be worn when required.

**SECTION 5 – REACTIVITY DATA**

- **Stability:** Stable
- **Conditions to Avoid:** Acids of all types with a pH of less than 4.0.
- **Incompatibility (Materials to Avoid):** Acids of all types with a pH of less than 4.0.
- **Hazardous Decomposition or By-products:** In use, dust and decomposing odors may be generated. Thermal decomposition may produce trace amounts of phenol and formaldehyde.

**SECTION 6 – HEALTH HAZARD DATA**

- **Routes of Entry:** Inhalation, Skin, Ingestion, Eyes
- **Health Hazards (Acute and Chronic):** Acute: Dust may be irritating to eyes and respiratory tracts at high concentrations. Chronic: May affect breathing capacity or aggravate existing respiratory disorders. Dust generated during use may contain trace amounts of phenol and formaldehyde, which, under excessive exposure, may cause skin sensitization and airway obstruction. For products containing inorganic fluorides, excessive exposure has been shown to increase bone density. No known adverse effects associated with ingestion, but ingestion not recommended.
- **Carcinogenicity:** The composition of dust/particulate matter is dependent upon several factors that are unknown and unknowable to the product manufacturer, and depend largely upon the composition of the work-piece on which this product is used, and any coating that may have been applied (see Section 5). Always assume that such particulates may contain toxic and/or inorganic materials, and follow sound work/hygiene practices as recommended by ANSI Z49.1. Under normal handling conditions, the product presents no health hazards.

**SECTION 7 – PRECAUTIONS for SAFE HANDLING and USE**

**SECTION 8 – CONTROL MEASURES**

- **Respiratory Protection (Specify Type):** If exposure is above the PEL or TLV, use NIOSH approved respirator for fume and dust.
- **Ventilation:** Use local exhaust ventilation when general ventilation is not keeping the airborne concentration below the TLV.
- **Protective Gloves:** Standard work gloves, preferably leather, required during use.
- **Eye Protection:** Always wear eye protection during sanding or grinding operations.
- **Other Protective Clothing or Equipment:** Use of this product may create elevated sound levels. Hearing protection should be worn when required. (See OSHA 29 CFR 1910.134 and other applicable regulations.)

**OTHER INFORMATION REQUIRED BY STATE OR FEDERAL LAW**

**California Proposition 65 Warning:** This product contains a chemical known to the State of California to cause cancer or birth defects or reproductive harm.

**New Jersey Right-To-Know Information:** 5 most predominant ingredients/hazardous and non-hazardous: 1. Aluminum oxide; 2. Cloth or paper; 3. Cured phenol formaldehyde resin; 4. Animal glue bond; 5. Cured urea formaldehyde resin.

**SARA Title III Notification Information:** All chemical compounds marked with an asterisk (*) are toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Super Fund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

**Disclaimer of Expressed and Implied Warranties:** The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use.