



# SAFETY DATA SHEET

## SECTION 1 – IDENTIFICATION

|                      |                                                                                                                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Identifier:  | Reinforced Resin Bonded Abrasive Products                                                                                                                                                                                                                    |
| Manufacturer Name:   | Preferred Abrasives, Inc.                                                                                                                                                                                                                                    |
| Address              | 2485 W. Stanfield Rd<br>Troy, OH 45373                                                                                                                                                                                                                       |
| Phone:               | 937-332-8855                                                                                                                                                                                                                                                 |
| Fax:                 | 937-332-8854                                                                                                                                                                                                                                                 |
| Emergency Phone:     | 937-609-5096                                                                                                                                                                                                                                                 |
| Recommended Use:     | Cutting and/or Grinding                                                                                                                                                                                                                                      |
| Restrictions On Use: | Dangerous, improper use may cause wheel breakage and serious injury. Do not abuse, over speed or drop wheel. Safe to use only if mounted, guarded and operated according to ANSI B7.1 and OSHA Regulations. Read safety tips in package. Always use a guard! |

## SECTION 2 - HAZARD(S) IDENTIFICATION

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard Status             | This product Is classified as non-hazardous under OSHA Hazard Communication Standard, 29 CFR 1910.1200                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Label elements            | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Pictograms                | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Description of Hazard(s): | Respiratory: Wheel dust is a respiratory irritant<br>Skin: Wheel dust and fiberglass reinforcement is a skin irritant<br>Ingestion: Acute product toxicity unknown<br>Eyes: Wheel dust is an eye irritant<br>Chronic: Potential chronic effects include skin sensitization and restricted breathing<br>Wear respirator, eye protection and protective clothing when using product.<br>Product will produce sparks and debris when in use, never use this product near reactive or flammable substances<br>Never use product if it comes in contact with water |
| Supplemental Labeling:    | Prolonged exposure to elevated noise levels during operations may affect hearing. A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being ground. Most of the dust generated during grinding is from the base material being ground and the potential hazard from this exposure must be evaluated. This dust may present a fire or dust explosion hazard and may present a serious health hazard.                                                                                                        |



### SECTION 3 - COMPOSITION

| Chemical Name             | Formula                        | CAS#                    | MAX % WT. ** |
|---------------------------|--------------------------------|-------------------------|--------------|
| Aluminum Oxide            | Al <sub>2</sub> O <sub>3</sub> | 1344-28-1               | 0 - 80       |
| Silicon Carbide           | SiC                            | 409-21-2                | 0 - 75       |
| Zirconium Oxide           | ZrO <sub>2</sub>               | 1314-23-4               | 0 - 75       |
| Cured Phenolic Resin      | N/A                            | N/A                     | 10 - 30      |
| Calcium Oxide             | CaO                            | 1305-78-8               | 0 - 10       |
| Iron Pyrite               | FeS <sub>2</sub>               | 12068-85-8              | 0 - 20       |
| Potassium Fluoborate      | KBF <sub>4</sub>               | 14075-53-7              | 0 - 10       |
| Graphite                  | C                              | 7782-42-5               | 0 - 5        |
| Fluorspar                 | CaF <sub>2</sub>               | 7789-75-5               | 0 - 10       |
| Barium Sulfate            | BaSO <sub>4</sub>              | 7727-43-7               | 0 - 10       |
| Calcium Carbonate         | CaCO <sub>3</sub>              | 471-34-1                | 0 - 10       |
| Alkali Aluminum Fluorides | Various                        | 60304-36-1 / 15096-52-3 | 0 - 15       |
| Potassium Sulfate         | K <sub>2</sub> SO <sub>4</sub> | 7778-80-5               | 0 - 10       |
| Fiberglass                | N/A                            | 65997-17-3              | 0 - 5        |

\*\*The exact percentage (concentration) of the composition has been withheld as a trade secret.

### SECTION 4 - FIRST-AID MEASURES

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required Treatment:                   | <p><b>Eyes:</b> Remove contact lenses if present. Flush eyes thoroughly with large amounts of water, holding eyelids open. If irritation persists, seek medical attention.</p> <p><b>Skin:</b> Wash skin with soap and water. If irritation or other symptoms develop, seek medical attention.</p> <p><b>Ingestion:</b> Do not induce vomiting. Rinse mouth with water. Seek medical attention if large amount is swallowed or if you feel unwell.</p> <p><b>Inhalation:</b> Move to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation or other symptoms persist.</p> |
| Symptoms – Effects,<br>Acute Delayed: | <p>Dust may cause eye and respiratory irritation. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs. Contains titanium dioxide. Prolonged overexposure to respirable dust may increase the risk of lung cancer. Risk of cancer depends on duration and level of exposure. Exposure to dust generated from processing the base material or coatings may present additional health hazards.</p>                                                                                                                                                                                                      |

### SECTION 5 - FIRE-FIGHTING MEASURES

|                                                  |                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extinguishing Techniques<br>including Equipment: | <p>Use any media that is suitable for the surrounding fire. Do not use water on fires involving metals dusts. Use an appropriate dry powder.</p> <p>Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.</p> |
| Chemical Hazards from<br>Fire:                   | <p>These products are not flammable or combustible; however, consideration must be given to the potential fire/explosion hazards from the base material being processed. Many materials create flammable/explosive dusts or turnings when machined or ground.</p>                  |



## SECTION 6 - ACCIDENTAL RELEASE MEASURES

|                                      |                                                                                                                            |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Emergency Procedures:                | Environmental: Avoid contamination of water supplies and environmental releases. Report spills as required by authorities. |
| Protective Equipment:                | Wear appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.                 |
| Methods of Containment and Clean-Up: | Collect dry material, avoiding creating airborne dust. Place in a suitable container for disposal.                         |

## SECTION 7 - HANDLING AND STORAGE

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling: | Inspect wheel prior to mounting on machine for damage. Do not use at speeds greater than product maximum rates per minute (rpm) as indicated. Use with adequate ventilation. Avoid breathing dust. Avoid eye and skin contact with grinding dust. Wear suitable eye protection, gloves and appropriate protective clothing. Wash thoroughly after handling. Consider potential exposure to components of the base materials or coatings being ground or cut. Refer to OSHA substance specific standards for additional work practice requirements where applicable. |
| Storage:  | No special storage required. Avoid excessive temperatures in storage. Store in a dry area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

| Chemical Name             | OSHA PEL respirable   | OSHA PEL total dust  | ACGIH TLV             |
|---------------------------|-----------------------|----------------------|-----------------------|
| Aluminum Oxide            | 5 mg/m <sup>3</sup>   | 15 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup>  |
| Silicon Carbide           | 5 mg/m <sup>3</sup>   | 15mg/m <sup>3</sup>  | 3 mg/m <sup>3</sup>   |
| Zirconium Oxide           | 5 mg/m <sup>3</sup>   | N/A                  | 10 mg/m <sup>3</sup>  |
| Cured Phenolic Resin      | None Established      | None Established     | None Established      |
| Calcium Oxide             | 5 mg/m <sup>3</sup>   | N/A                  | 2 mg/m <sup>3</sup>   |
| Iron Pyrite               | None Established      | None Established     | None Established      |
| Potassium Fluoborate      | 2.5 mg/m <sup>3</sup> | N/A                  | 2.5 mg/m <sup>3</sup> |
| Graphite                  | 5 mg/m <sup>3</sup>   | 15 mg/m <sup>3</sup> | 2 mg/m <sup>3</sup>   |
| Fluorspar                 | 2.5 mg/m <sup>3</sup> | N/A                  | 2.5 mg/m <sup>3</sup> |
| Barium Sulfate            | 5 mg/m <sup>3</sup>   | 15 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup>   |
| Calcium Carbonate         | 5 mg/m <sup>3</sup>   | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup>  |
| Alkali Aluminum Fluorides | 2.5 mg/m <sup>3</sup> | N/A                  | 2.5 mg/m <sup>3</sup> |
| Potassium Sulfate         | 15 mg/m <sup>3</sup>  | N/A                  | 10 mg/m <sup>3</sup>  |
| Fiberglass                | 5 mg/m <sup>3</sup>   | 15 mg/m <sup>3</sup> | 5 mg/m <sup>3</sup>   |



Ventilation: Engineering controls recommended. See ANSI Z43.1. Refer to OSHA 29 CFR 1910.94.  
Respiratory: OSHA/NIOSH approved respirator. See OSHA 29 CFR 1910.134  
Eye Protection: Protective eyewear such as safety goggles, safety glasses or face shield is recommended. See OSHA 29 CFR 1910.133.  
Protective Gloves: Leather gloves.  
Hearing Protection: Hearing protection such as earplugs or approved earmuffs. Refer to OSHA 29 CFR 1910.95.  
Body/Skin Protection: Leather apron, fire retardant jacket/shirt/lab coat to shield from heavy spark showers in operation.  
Other Protections/Precautions: Visually inspect all wheels before mounting for possible damage. Do not operate above maximum operating speed. Always use a guard. Refer to ANSI B7.1 for Safety Requirements for the Use, Care and Protection of Abrasive Wheels.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

|                                   |                                   |                            |                 |
|-----------------------------------|-----------------------------------|----------------------------|-----------------|
| Appearance:                       | Dark colored, solid bonded wheel. | Solubility in water:       | Insoluble       |
| Odor:                             | None, faint phenolic odor         | Boiling Point:             | N/A             |
| Flammability or Explosive Limits: | Not flammable                     | Flash Point:               | Not flammable   |
| Vapor Pressure:                   | N/A                               | Evaporation Rate:          | N/A             |
| Odor Threshold:                   | N/A                               | Flammability (solid, gas): | Not flammable   |
| Vapor Density:                    | N/A                               | Auto-ignition Temperature: | N/A             |
| pH:                               | N/A                               | Decomposition Temperature: | 800 °F (425 °C) |
| Relative Density:                 | N/A                               | Viscosity:                 | N/A             |
| Melting Point/Freezing Point:     | N/A                               |                            |                 |

## SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use and storage.  
Chemical Stability: Stable  
Hazardous Polymerization: Will not occur  
Other: Dust from grinding and cutting could contain potentially hazardous components of the base material being ground or coatings applied to the base material.

## SECTION 11 - TOXICOLOGICAL INFORMATION

| Chemical Name             | Route of Exposure | Acute LD50                       |
|---------------------------|-------------------|----------------------------------|
| Aluminum Oxide            | Oral              | >10000 mg/kg (rat)               |
| Silicon Carbide           | Oral              | >2000 mg/kg (rat)                |
| Zirconium Oxide           | Oral              | >5000 mg/kg (rat)                |
| Cured Phenolic Resin      | N/A               | No acute toxicity data available |
| Calcium Oxide             | N/A               | No acute toxicity data available |
| Iron Pyrite               | N/A               | No acute toxicity data available |
| Potassium Fluoborate      | Oral              | >5000 mg/kg (rat)                |
| Graphite                  | Oral              | >5000 mg/kg (rat)                |
| Fluorspar                 | Oral              | >4000 mg/kg (rat)                |
| Barium Sulfate            | Oral              | >5000 mg/kg (rat)                |
| Calcium Carbonate         | Oral              | >5000 mg/kg (rat)                |
| Alkali Aluminum Fluorides | Oral              | >5000 mg/kg (rat)                |
| Potassium Sulfate         | Oral              | >5000 mg/kg (rat)                |
| Fiberglass                | N/A               | No acute toxicity data available |

Routes of Exposure: Inhalation, skin contact, eye contact and ingestion



|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Symptoms:          | Breathing in dust may cause irritation to the nose, throat and upper respiratory tract. May cause abrasive skin irritation. May cause eye irritation and injury. Not toxic if ingested. Swallowing may cause gastrointestinal disturbances or obstructions.                                                                                                                                                                                                                               |
| Acute and Chronic Effects: | Prolonged inhalation of respirable dust may cause adverse lung effects, including cancer. Smoking may aggravate chronic effects. Prolonged exposure to elevated noise levels during operations may affect hearing. In most cases, the greater hazard is the exposure to the dust/fumes from the material (paint/coatings) being cut and ground. Most of dust is generated during grinding and cutting of the base material and the potential hazard from this exposure must be evaluated. |
| Carcinogenicity:           | Unknown                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mutagenicity:              | Unknown                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Reproductive Effects       | Unknown                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## SECTION 12 - ECOLOGICAL INFORMATION\*

|                           |                                                       |
|---------------------------|-------------------------------------------------------|
| Data from Toxicity Tests: | No adverse effects on aquatic organisms are expected. |
|---------------------------|-------------------------------------------------------|

## SECTION 13 - DISPOSAL CONSIDERATIONS\*

|                            |                                                                                  |
|----------------------------|----------------------------------------------------------------------------------|
| Proper Disposal Practices: | Disposal practices are in accordance with local, state and national regulations. |
|----------------------------|----------------------------------------------------------------------------------|

## SECTION 14 - TRANSPORT INFORMATION\*

|                                         |                                                      |
|-----------------------------------------|------------------------------------------------------|
| Proper Transport of Hazard<br>Material: | Not regulated as a hazardous material for transport. |
|-----------------------------------------|------------------------------------------------------|

## SECTION 15 - REGULATORY INFORMATION\*

|                                                  |                   |
|--------------------------------------------------|-------------------|
| Safety, Health and Environmental<br>Regulations: | No Data Available |
|--------------------------------------------------|-------------------|

## SECTION 16 - OTHER INFORMATION

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date SDS Prepared:       | New SDS                                                                                                                                                                                                                                                                                                                                                                                                         |
| Last Revision Completed: | May 10, 2023                                                                                                                                                                                                                                                                                                                                                                                                    |
| Statement of Accuracy:   | The above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Preferred Abrasives, Inc. shall not be held liable for any damage resulting from handling or from contact with the above products. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process. |

\*Non-Mandatory