



SAFETY DATA SHEET
RESIN BONDED ABRASIVES

SECTION 1 – IDENTIFICATION

Product name: Grinding and cutting wheels, resin (Type 1, Type 27, Type 28, Type 29)
Cup Wheels (Type 11), Cones & Plugs (Type 16, Type 17 and Type 19)

Product Use: Cutting and grinding metals

Company: Buckeye Abrasive, Inc. – A McCoy Group
1020 Eagon Street, Barberton, Ohio 44203

Emergency: 330-753-1041 www.buckeyeabrasive.com

SECTION 2 – HAZARD INFORMATION

Precautionary Statement: Use with adequate ventilation. Avoid breathing dust. Wear eye protection. Wash hands thoroughly after handling and use. Observe recommended operating speeds.

Hazard Statement: Dust may cause eye and respiratory irritation. Dust particles may cause abrasive injury to eyes. Using wheels in excess of recommended operating speeds may result in serious injury due to wheel breakage.

Labeling Element:



SECTION 3 – COMPOSITION / INGREDIENT INFORMATION

Chemical Name	CAS No.	Concentration
Aluminum Oxide	1344-28-1	0-95
Silicon Carbide	409-21-2	0-95
Zirconium Oxide	1314-23-4	0-80
Cured Phenolic Resin	N/A	1-30
Iron Pyrite	12068-85-8	0-20
Woven Fiberglass	N/A	0-15
Calcium Oxide	1305-78-8	1-10
Calcium Carbonate	1317-65-3	0-5
Iron Oxide	1309-37-1	0-5
Graphite	7782-42-5	0-5

The specific identity and/or exact percentage has been withheld as a trade secret.

SECTION 4 – FIRST AID

- Signs of Exposure:** Coughing, shortness of breath due to dust. May irritate eyes and cause skin irritation.
- First Aid for Inhalation:** Remove victim to fresh air.
- First Aid for Eye Contact:** Flush eyes with water at eye wash station.
- First Aid for Skin Contact:** Wash with mild soap and warm water.

SECTION 5 – FIRE FIGHTING MEASURES

- Means of Extinction:** Use any media that is appropriate for the surrounding fires.
- Specific Hazards:** The product is not combustible. Consideration must be given to the potential fire or explosion hazards from the base material being processed. Many materials create flammable or explosive dusts or turnings when machined or ground.
- Special Precautions:** None needed.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use of appropriate respirator along with protective eyewear and clothing as needed to avoid eye contact and inhalation of dust.
- Environmental Precautions:** Minimize generation of dust into environment. Report release as required by local, state and federal authorities.
- Cleanup Procedure:** Pick-up, sweep or vacuum material and place into container for proper disposal.

SECTION 7 – HANDLING AND STORAGE

- Handling:** Store in accordance with ANSI B7.2 Safety Code. Section 2.1.
All grinding wheels are breakable and therefore care shall be exercised in handling and storage to prevent damage. Handle carefully to prevent dropping or bumping. Do not roll wheels. Use trucks which provide support and protection in transporting. Place wheels carefully on shelf or in boxes.
- Storage:** Store in accordance with ANSI B7.2 Safety Code. Section 2.2.
Wheels shall not be stored subject to: (a) exposure to high humidity, water or other liquids. (b) freezing temperatures. (c) any temperature low enough to cause condensation when relocating to a warmer area.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Aluminum Oxide	5 mg/m ³ ACGIH TLV 15 mg/m ³ TWA OSHA PEL
Silicon Carbide	10 mg/m ³ TWA ACGIH TLV 15 mg/m ³ TWA OSHA PEL
Zirconium Oxide	5 mg/m ³ TWA ACGIH TLV 5 mg/m ³ TWA OSHA PEL
Cured Phenolic Resin	None established
Iron Pyrite	None established
Woven Fiberglass	5 mg/m ³ TWA ACGIH TLV 1 f/cc TWA ACGIH TLV
Calcium Oxide	2 mg/m ³ TWA ACGIH TLV 5 mg/m ³ TWA OSHA PEL
Calcium Carbonate	15 mg/m ³ TWA OSHA PEL
Iron Oxide	5 mg/m ³ TWA ACGIH TLV 10 mg/m ³ TWA OSHA PEL
Graphite	2 mg/m ³ TWA ACGIH TLV 15 mppcf mg/m ³ TWA OSHA PEL

Appropriate Engineering Controls: Use local exhaust or general ventilation as required to minimize exposure to dust and maintain the concentration of contaminants below occupational exposure limits.

Personal Protective Measures: Use appropriate respirator to limit exposure during mixing process. Wear protective apron or clothing. Cloth or leather gloves are recommended. Safety goggles or face shield is recommended. Hearing protection may be required.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Black or brown wheels	Odor threshold: Not applicable
Vapor Pressure: Not applicable	Vapor Density: Not applicable
pH: Not applicable	Relative Density: Not applicable
Melting point/freezing point: Not applicable	Solubility(ies): Not applicable
Boiling point: Not applicable	Flash point: Non-combustible
Evaporation rate: Not applicable	Flammability (solid,gas): Not applicable
Partition coefficient: n-octanol/water: Not applicable	Auto-ignition temperature: Not applicable
Decomposition temperature: Not applicable	Viscosity: Not applicable

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: Not reactive

Chemical stability: Stable

Hazardous Reactions: None known

Conditions to avoid: None known

Incompatible materials: None known

Anticipated hazardous decomposition: Dust from grinding could contain ingredients listed in Section 3 along with other potentially hazardous components of the base material being ground.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Exposure:

Inhalation: Dust may cause respiratory irritation.

Ingestion: Do not ingest. Large pieces may cause obstruction or abrasions of airways.

Skin Contact: None expected. May cause irritation or abrasion on skin if handled without protective gear.

Eye Contact: Dust may cause irritation

Short/Long Term Exposure: Long term exposure may cause lung damage, coughing, shortness of breath and diminished breathing capacity. See protective measures to limit symptoms.

Numerical measures of toxicity:

Aluminum Oxide: Oral rat LD50 >5,000 mg/kg

Silicon Carbide: Oral rat LD50 >2000 mg/kg, Dermal rat LD50 >2000 mg/kg

Zirconium Oxide: Oral rat LD50 >5000 mg/kg

Iron Pyrite: No toxicity data available

Calcium Oxide: Oral rat LD50 >7340 mg/kg

Iron Oxide: Oral rat LD50 >10000 mg/kg

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity:

Aluminum Oxide: 96 hr LC50 Pimephales promelas 35 mg/L

Silicon Carbide: No data available

Zirconium Dioxide: 96 hr LC50 Danio rerio >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr

Iron Pyrite: No data available

Calcium Oxide: 96 hr LC50 Cyprinus carpio >1070 mg/L

Iron Oxide: No data available

Persistence and Degradability: Biodegradation is not applicable to inorganic compounds.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other adverse effects: None known.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable local, state and federal regulations. Local regulations may be more stringent than regional and national requirements. 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

DOT Hazardous Materials Description: Not regulated

Proper Shipping Name: Not regulated

UN Number: None

Hazard Class/Packing Group: None

Labels Required: None

Special Precautions: None

SECTION 15 – REGULATORY INFORMATION

SARA Section 311/312 Hazard Categories: Not Applicable (manufactured articles)

SARA Section 313: Some products contain the following toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CER Part 372 (Toxic Chemical Release Reporting): None

California Proposition 65: WARNING! You create dust when you cut, sand, drill or grind materials such as wood, paint, cement, masonry or metal. This dust often contains chemicals known to cause cancer, birth defects or other reproductive harm.

Canadian WHMIS Classification: Not a controlled product. This product meets the definition of a “manufactured article” under the WHMIS regulations. This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

SECTION 16 – OTHER INFORMATION

SDS Revision Date: May 15, 2015

Reason for update: Mandated update

NOTICE: The information and recommendations set forth herein are taken from sources and references believed to be accurate and complete as of date of preparation of the SDS. However, Buckeye Abrasives, Inc. makes no expressed or implied warranty with respect to the accuracy of the information or the suitability of the recommendation and assumes no liability to any user thereof.