

BULLARD ABRASIVES®

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Reinforced Resin Bonded Abrasive Products

Recommended use of the chemical and restrictions on use: Grinding and/or Finishing

Supplier: Bullard Abrasives, Inc.
6 Carol Drive
Lincoln, Rhode Island 02865
Phone: 800-227-4469
Fax: 401-333-3077

Emergency Phone: For Chemical Emergency
Spill, Leak, Fire, or Accident
Call **CHEMTREC** Day or Night
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

SDS Date of Preparation: 02/19/20

2. HAZARDS IDENTIFICATION

As sold, this product is a manufactured article. During processing, dust generated has the following hazards:

GHS Classification:

Physical:	Health:
Not Hazardous	Carcinogen Category 2 Specific Target Organ Toxicity – Repeated Exposure Category 1 (Respiratory tract, teeth, and bones)

GHS Label Elements:



Danger!

Statements of Hazard

H351 Suspected of causing cancer by inhalation.
H372 Causes damage to respiratory tract, teeth, and bones through prolonged or repeated exposure.

Precautionary Phrases

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P314 Get medical attention if you feel unwell.

P280 Wear eye protection.

P308+P313 IF exposed or concerned: Get medical attention.

P405 Store locked up.

P501 Dispose of contents in accordance with local, regional and national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Aluminum Oxide	1344-28-1	0 - 80
Silicon Carbide	409-21-2	0 - 75
Zirconium Oxide	1314-23-4	0 - 75
Cured Phenolic Resin	N/A	10 - 30
Iron Pyrite	12068-85-8	0 - 20
Alkali Aluminum Fluorides	60304-36-1 / 15096-52-3	0 - 15
Calcium Oxide	1305-78-8	0 - 10
Potassium Fluoborate	14075-53-7	0 - 10
Fluorspar	7789-75-5	0 - 10
Barium Sulfate	7727-43-7	0 - 10
Calcium Carbonate	471-34-1	0 - 10
Potassium Sulfate	7778-80-5	0 - 10
Graphite	7782-42-5	0 - 5
Fiberglass	65997-17-3	0 - 5
Titanium Dioxide	18282-10-5	0-<5

The exact concentration is being withheld as a trade secret.

4. FIRST AID MEASURES

Eye: Flush eyes thoroughly with water, holding open eyelids. Get medical attention if irritation persists. Obtain immediate medical attention for foreign body in the eye.

Skin: Wash dust from skin with soap and water. Launder contaminated clothing before reuse.

Ingestion: If grinding dust is swallowed, seek medical attention.

Inhalation: If overexposed to grinding dust, remove victim to fresh air and get medical attention.

Most Important Symptoms: May cause mechanical eye and skin irritation. Inhalation of dust may cause nose, throat and upper respiratory irritation. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs. Suspected of causing cancer based on animal data. Prolonged overexposure may cause damage to the respiratory tract, bones and teeth by inhalation

Indication of immediate medical attention/special treatment: Immediate medical attention is not required.

5. FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use media appropriate for surrounding fire.

Specific Hazards Arising From the Chemical: This product is not 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 sanded, machined or ground.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.

Methods and Materials for Containment and Cleaning Up: Pick up, sweep up or vacuum and place in a container for disposal. Minimize generation of dust. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling and use, especially before eating, drinking or smoking. Consider potential exposure to components of the base materials or coatings being sanded or ground. Refer to OSHA's substance specific standards for additional work practice requirements where applicable.

Conditions for Safe Storage, Including Any Incompatibilities: Store in a dry location.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Aluminum Oxide	1 mg/m ³ ACGIH TLV (respirable fraction) (as Al metal) 15 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA OSHA PEL (respirable fraction)
Silicon Carbide	3 mg/m ³ TWA ACGIH TLV (respirable fraction) 10 mg/m ³ TWA ACGIH TLV (inhalable fraction) 15 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA OSHA PEL (respirable fraction)
Zirconium Oxide	5 mg/m ³ TWA ACGIH TLV 10 mg/m ³ STEL ACGIH TLV 5 mg/m ³ TWA OSHA PEL
Cured Phenolic Resin	None Established
Calcium Oxide	5 mg/m ³ TWA OSHA PEL (respirable fraction) 2 mg/m ³ TWA ACGIH TLV
Iron Pyrite	None Established
Potassium Fluoroborate (as fluorides)	2.5 mg/m ³ TWA ACGIH TLV 2.5 mg/m ³ TWA OSHA PEL
Potassium Fluoroborate (as borates)	2 mg/m ³ TWA ACGIH TLV (Inhalable) 6 mg/m ³ TWA ACGIH STEL (Inhalable)
Graphite	2 mg/m ³ TWA ACGIH TLV 15 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA OSHA PEL (respirable fraction)
Fluorspar	2.5 mg/m ³ TWA ACGIH TLV 2.5 mg/m ³ TWA OSHA PEL (respirable fraction)
Barium Sulfate	5 mg/m ³ TWA ACGIH TLV 5 mg/m ³ TWA OSHA PEL (respirable fraction)
Calcium Carbonate	10 mg/m ³ TWA ACGIH TLV 10 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA OSHA PEL (respirable fraction)

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Alkali Aluminum Fluorides	2.5 mg/m ³ TWA ACGIH TLV 2.5 mg/m ³ TWA OSHA PEL (respirable fraction)
Potassium Sulfate	10 mg/m ³ TWA ACGIH TLV 15 mg/m ³ TWA OSHA PEL (respirable fraction)
Fiberglass	5 mg/m ³ TWA ACGIH TLV (inhalable) 15 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA OSHA PEL (respirable fraction)
Titanium Dioxide	10 mg/m ³ TWA ACGIH TLV 15 mg/m ³ TWA (Total dust) OSHA PEL

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

Respiratory Protection: In operations where exposures are excessive or symptoms occur, an approved respirator with dust/mist cartridges or supplied air respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

Skin protection: Cloth or leather gloves recommended.

Eye protection: Safety goggles or face shield over safety glasses with side shields.

Other: Protective clothing as needed to prevent contamination of personal clothing. Hearing protection may be required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Dark colored, solid bonded wheel.

Physical State: Solid	Odor Threshold: Not available
Vapor Density: Not applicable	Initial Boiling Point/Range: Not applicable
Solubility In Water: Insoluble	Vapor Pressure: Not applicable
Relative Density: Not available	Evaporation Rate: Not applicable
Melting/Freezing Point: Not applicable	pH: Not applicable
VOC Content: Not available	Octanol/Water Coefficient: Not available
Solubility: Not available	Decomposition Temperature: 800 °F (425 °C)
Viscosity: Not applicable	Flammability (solid, gas): Not flammable
Flashpoint: Not applicable	Autoignition Temperature: Not applicable
Flammable Limits: LEL: Not applicable UEL: Not applicable	

10. STABILITY AND REACTIVITY

Reactivity: Not normally reactive.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: None known.

Incompatible Materials: Strong acids, strong bases, strong oxidizing agents.

Hazardous Decomposition Products: Dust from sanding could contain ingredients listed in Section 3 and other, potentially more hazardous components of the base material being sanded or coatings applied to the base material.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

Eye: Dust may cause eye irritation. Dust particles may cause abrasive injury to the eyes.

Skin: None expected under normal use conditions. Rubbing product across the skin may cause mechanical irritation or abrasions.

Ingestion: None expected under normal use conditions. Swallowing large pieces may cause obstruction of the gastrointestinal tract.

Inhalation: Inhalation of dust may cause mild irritation of the nose throat and upper respiratory tract.

Chronic: Long-term overexposure to respirable dust may cause lung damage (fibrosis) with symptoms of coughing, shortness of breath, diminished breathing capacity, and cancer. Prolonged overexposure to fluorides may cause a bone condition, fluorosis. 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.

Sensitization: This material is not known to cause sensitization.

Carcinogenicity: Titanium Dioxide is listed by IARC as a group 2B Carcinogen (suspected human carcinogen). None of the other components is listed as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

Germ Cell Mutagenicity: None known.

Reproductive Toxicity: None known

Numerical Measures of Toxicity:

Aluminum Oxide: LD50 Oral rat >5,000 mg/kg, Inhalation rat LC50 >7.6 mg/L/1 hr

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

Zirconium Oxide: Oral rat LD50->5000 mg/kg; Inhalation rat LC50->4.3 mg/L/4hr

Potassium Fluoroborate: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 >5.3 mg/L/4 hr

Graphite: Oral rat LD50->5000 mg/kg

Fluorspar: Oral rat LD50->4000 mg/kg

Barium Sulfate: Oral rat LD50->5000 mg/kg

Calcium Carbonate: Oral rat LD50->5000 mg/kg

Alkali Aluminum Fluorides: LD50 oral rat > 10000 mg/kg, LC50 inhalation rat > 200 mg/L, LD50 dermal rabbit > 2000 mg/kg

Potassium Sulfate: Oral rat LD50->5000 mg/kg

Titanium Dioxide: Inhalation rat LC50- >2.04 mg/L/4hr (no deaths)

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

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

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

Potassium Fluoroborate: 96 hr LC50 Leuciscus idus 760 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata >100 mg/L

Alkali Aluminum Fluorides: Danio rerio LC50 > 100 mg/L/96hr

Persistence and Degradability: This product is inorganic and not subject to biodegradation. This material is believed not to persist in the environment.

Bioaccumulative Potential: This material is not expected to bioconcentrate in organism.

Mobility in Soil: No data available.

Other Adverse Effects: No hazards to the environment are expected from this product. However, consideration must be given to potential environment effects of the base material being processed.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local and national environmental regulations.

14. TRANSPORT INFORMATION

DOT Hazardous Materials Description:

Proper Shipping Name: Not Regulated

UN Number: Not applicable

Hazard Class/Packing Group: Not applicable

Labels Required: Not applicable

IMDG Shipping Name: Not Regulated

UN Number: None

IMDG Hazard Class/Packing Group: None

IMDG Hazard Labels Required: None

IATA Shipping Name: Not Regulated

UN Number: None

IATA Hazard Class/Packing Group: None

IATA Hazard Labels Required: None

15. REGULATORY INFORMATION

CERCLA 103 Reportable Quantity: This product is not subject to reporting under CERCLA. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

Hazard Category for Section 311/312: Refer to Section 2 for OSHA Hazard Classification.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

EPA TSCA Inventory: All of the ingredients in this product are listed on the EPA TSCA Inventory

Section 302 Extremely Hazardous Substances (TPQ): None

16. OTHER INFORMATION

NFPA Rating: Health = 1 Flammability = 0 Instability = 0

HMIS Rating: Health = 1* Flammability = 0 Physical Hazard = 0

*Chronic health hazard

Date of current revision: 02/19/20

Revision History: New SDS.

Date of previous revision: New SDS

NOTICE

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This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Coyne Chemical shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.