

SAFETY DATA SHEETOrganic Bonded Abrasives, Type 2 (1/13)
SDS #11**PFERD****1. PRODUCT AND COMPANY IDENTIFICATION****Product Identifier:** Organic Bonded Abrasives, Type 2**Covers:** Cut-off-wheels EH (flat type), EHT (depressed center type), T, PT; Steel Core Wheels; Reinforced Grinding Wheels E; Cup Wheels ETT**Identified Uses of the manufactured article and Uses Advised Against:** Abrasive materials.**Details of the Supplier of the Safety Data Sheet****Manufacturer:** PFERD INC.
30 Jytek Drive
Leominster, MA01453**Internet:** www.pferd.com**E-Mail:** Jim.Haglund@pferdusa.com**Information Phone:** (978)840-6420**Emergency Telephone Number:** (978)840-6420 (8.00 a.m. to 4.30 p.m. Eastern Time)**SDS Date of Preparation:** May 02, 2014**2. HAZARDS IDENTIFICATION**

This product is a black, brown or reddish colored solid wheel with no odour.

EMERGENCY OVERVIEW**Dust may cause eye and respiratory irritation. Dust particles may cause abrasive injury to the eyes.****Other Hazards**

A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being sanded. Most of the dust generated during cutting and grinding is from the base material being sanded and the potential hazard from this exposure must be evaluated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component	CAS #	%
Aluminum Oxide	1344-28-1	0-95
and/or Silicon Carbide	409-21-2	0-95
and/or Steel	Mixture	0-40
and Phenol-Formaldehyde resin, cured	9003-35-4	2-30
and/or Zirconium Oxide	1314-23-4	0-25
and/or Potassium Aluminium Fluoride	60304-36-1	0-20
and/or Iron Disulfide	12068-85-8	0-20
and/or Fiberglass weaves	65997-17-3	0-15
and/or Cryolite	13775-53-6; 15096-52-3	0-15
and/or Copper Iron Disulphide	1308-56-1	0-10
and/or Zinc Sulphide	1314-98-3	0-10

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and/or Calcium Carbonate	471-34-1	0-8
and/or Manganese Dichloride	7773-01-5	0-7
and/or Polyethylene	9002-88-4	0-5
and/or Manganese Carbonate	598-62-9	0-4
and/or Calcium Fluoride	7789-75-5	0-4
and/or Fleece	Mixture	0-3
and/or Adhesive, cured	Mixture	0-3
and/or Graphite	7782-42-5	0-2
and/or Paper	Mixture	0-2

4. FIRST AID MEASURES**Description of First Aid Measures**

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

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

Eye Contact: Flush eyes thoroughly with water, holding open eyelids. Get medical attention if irritation occurs and persists.

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

Most important symptoms and effects, both acute and delayed: Use may generate dust that may cause eye and respiratory tract irritation. Contains an ingredient that may have effects on or via lactation. Dust is harmful by inhalation and ingestion.

Indication of any immediate medical attention and special treatment needed: None known

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use any media that is appropriate for the surrounding fire.

Special Hazards Arising from the Manufactured Article

Unusual Fire and Explosion Hazards: 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.

Hazardous Combustion Products: None known.

Advice for Fire-Fighters: None needed.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures:**

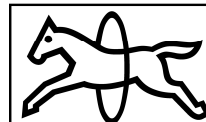
Minimize generation of dust. Use appropriate protective equipment to avoid inhalation and eye contact if dust is generated.

Environmental Precautions:

Notify authorities as required by local, state and federal regulations.

Methods and Material for Containment and Cleaning Up:

Pick up, sweep up or vacuum any dust, and place in a container for disposal.

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Reference to Other Sections: Refer to Section 8 for personal protective equipment and Section 14 for proper disposal.

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**Control Parameters:**

Hazardous Component	OSHA PEL	ACGIH TLV	Ontario	Québec
Aluminum Oxide	15 mg/m ³ TWA(total dust) 5 mg/ m ³ TWA (Respirable)	1 mg/m ³ (respirable) (as Al metal)	None Established	10 mg/m ³
and/or Silicon Carbide	15 mg/m ³ TWA (total dust) 5 mg/m ³ TWA (respirable)	0.1 f/cc TWA	10 mg/m ³ TWA (inhalable) 3 mg/m ³ (respirable)	10 mg/m ³
and/or Steel	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	None Established	None Established	None Established
and Phenol-Formaldehyde resin, cured	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	None Established	None Established	None Established
and/or Zirconium Oxide (as Zr)	5 mg/m ³	5 mg/m ³ TWA 10 mg/m ³ STEL	5 mg/m ³ TWA 10 mg/m ³ STEL	5 mg/m ³ TWA 10 mg/m ³ STEL
and/or Potassium Aluminum Fluoride (as F)	2.5 mg/m ³	2.5 mg/m ³	2.5 mg/m ³	2.5 mg/m ³
and/or Iron Disulfide	None Established	None Established	None Established	None Established
and/or Fiberglass weaves	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	5 mg/m ³ (inhalable) 1 f/cc	1 f/cc	10 mg/m ³ (total dust) 2 f/cc
and/or Cryolite (as F)	2.5 mg/m ³	2.5 mg/m ³	2.5 mg/m ³	2.5 mg/m ³
and/or Copper Iron Disulphide	None Established	None Established	None Established	None Established
and/or Zinc Sulphide	None Established	None Established	None Established	None Established

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and/or Calcium Carbonate	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	None Established	None Established	10 mg/m ³
and/or Manganese Dichloride (as Mn)	5 mg/m ³ Ceiling	0.2 mg/m ³	0.2 mg/m ³	5 mg/m ³
and/or Polyethylene	None Established	None Established	None Established	None Established
and/or Manganese Carbonate (as Mn)	5 mg/m ³ Ceiling	0.2 mg/m ³	0.2 mg/m ³	5 mg/m ³
and/or Calcium Fluoride (as F)	2.5 mg/m ³	2.5 mg/m ³	2.5 mg/m ³	2.5 mg/m ³
and/or Fleece	None Established	None Established	None Established	None Established
and/or Adhesive, cured	None Established	None Established	None Established	None Established
Graphite	15 mppcf (natural) 15 mg/m ³ (total dust) 5 mg/m ³ (respirable) (synthetic)	2 mg/m ³ (respirable)	2 mg/m ³	2 mg/m ³
Paper	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	10 mg/m ³	10 mg/m ³	10 mg/m ³

Note: Consider also components of base materials and coatings being ground.

Exposure Controls

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

Respiratory Protection: Use an approved respirator if exposure limits are exceeded or where dust exposures are excessive. Consider the potential for exposure to components of the coatings or base material being ground in selecting proper respiratory protection. Refer to local regulations for specific standards where appropriate. Selection of respiratory protection depends on the contaminant type, form and concentration. Select and use respirators in accordance with applicable regulations and good industrial hygiene practice.

Gloves: 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**Information on basic Physical and Chemical Properties**

Appearance: Wheels, cut-off-, grinding- and cup wheels.

Odor: None

Boiling Point: Not Applicable

Solubility in Water: Insoluble

Specific Gravity: Not Determined

pH: Not Applicable

Odor Threshold: Not Applicable

Vapor Pressure: (mm Hg) Not Applicable

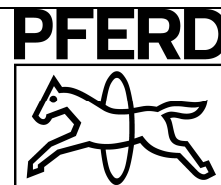
Vapor Density: (Air = 1) Not Applicable

Evaporation Rate: Not Applicable

Octanol/Water Partition Coefficient: Not Available

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Melting/Freezing Point: Not Applicable
Flammable Limits: LEL: Not Applicable
Autoignition Temperature: Not Applicable
Viscosity: Not Applicable
Oxidizing Properties: Not an Oxidizer
Molecular Formula: Mixture
Molecular Weight: Mixture

Flash Point: Non-Combustible
UEL: Not Applicable
Decomposition Temperature: Not Available
Explosive Properties: Not Explosive
Relative Density: Not Determined
Flammability (solid, gas): Not flammable

10. STABILITY AND REACTIVITY

Reactivity: Not reactive
Chemical Stability: Stable
Possibility of Hazardous Reactions: Not expected to occur
Conditions to Avoid: None known.
Incompatible Materials: None known
Hazardous Decomposition Products: Dust from cutting and grinding 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

Information on Toxicological Effects:

Ingestion: None expected under normal use conditions. May be harmful if swallowed.
Inhalation: Dust may cause respiratory irritation. May be harmful by inhalation. Prolonged inhalation may cause lung damage.
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.

Acute Toxicity Values:

Aluminum oxide: Oral rat LD50 – >15,900 mg/kg; Inhalation rat LC50 – 7.6 mg/L
Silicon carbide: Oral rat LD50 – >2000 mg/kg; Dermal rabbit LD50 – >2000 mg/kg
Zirconium dioxide: Oral rat LD50 – >5000 mg/kg; Inhalation rat LC50 – >4.3 mg/L/4 hr (highest conc. Achievable with no deaths)
Calcium carbonate: Oral rat LD50 – >2000 mg/kg; Inhalation rat LC50 – >3 mg/L/4 hr; Dermal rabbit LD50 – >2000 mg/kg
Cryolite: LD50 Oral rat >5g/kg, LC50 Inhalation rat 4.45 mg/L/4 hr
Potassium Aluminum Fluoride: LC50 Inhalation rat >4.92 mg/L/1 hr
Manganese Dichloride: LD50 Oral rat 1484 mg/kg

Mixture Calculated Data: LD50 Oral >21200 mg/kg, LC50 Inhalation >7.45 mg/L

Skin corrosion/irritation: Not corrosive or irritating
Eye damage/irritation: May cause eye irritation.
Respiratory irritation: Causes respiratory tract irritation.
Respiratory Sensitization: Not expected to be sensitizing
Skin Sensitization: This material is not known to cause sensitization.
Germ Cell Mutagenicity: Not expected to be a mutagen
Carcinogenicity: None of the components of this product are listed as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

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No ecological data is available for this product. This product contains ingredients that are toxic to aquatic organisms with long-lasting effects. Avoid environmental releases.

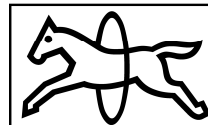
Persistence and Degradability: No data available**Bioaccumulative Potential:** No data available**Mobility in Soil:** Not applicable**Results of PBT and vPvB Assessment:** Not applicable**Other Adverse Effects:** Not applicable**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods:**

Dispose in accordance with all applicable local, state/provincial 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.

14. TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
US DOT	None	Not Regulated	None	None	No
Canadian TDG	None	Not Regulated	None	None	No
EU ADR/RID	None	Not Regulated	None	None	No
IMDG	None	Not Regulated	None	None	No
IATA/ICAO	None	Not Regulated	None	None	No

Special Precautions for User: Not applicable**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

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Zinc Sulphide (as zinc compounds)	1314-98-3	0-10%
Aluminum oxide (fibrous form)	1344-28-1	0-95%

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 Regulations:****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 SDS discloses information elements required by the CPR.

16. OTHER INFORMATION**NFPA Hazard Rating:** Health: 1
Fire: 0
Reactivity: 0**Date Previous Revision:** None**Date This Revision:** 05/02/2014**Revision Summary:** 2**Prepared By:** Chandra D Gioiello, CIH IH&SC Inc., Shelton, CT 06484
Dr. Axel Deeg, ADEEGO GmbH, Wildsteig 4A, 42113 Wuppertal, Germany

The preceding information is believed to be correct and current as of the date of preparation of this Safety Data Sheet. Since the use of this information and the conditions of use of this product are not within the control of August Rüggeberg GmbH & Co. KG, it is the user's obligation to assure safe use of this product.