

Material Safety Data Sheet



Polishing Paste Bars PP, Type 1

1. Product and company identification

Product name	: Polishing Paste Bars PP, Type 1
Trade name	: POLISH.COMP.BARS PP 2 VP MS
Material uses	: Polishing paste.
Supplier/Manufacturer	: PFERD INC. 30 Jytek Drive Leominster, MA 01453 Tel: (978) 840-6420 Fax: (978) 840-6421 Email: Jim.Haglund@pferdusa.com
MSDS #	: 32
Validation date	: 09/15/2008
Responsible name	: Atrion Regulatory Services, Inc.
Emergency telephone number (with hours of operation)	: 978-790-3249 Contact Person: Mr. Mark Leblanc 8.00 am to 17.30 p.m. Eastern Time

2. Hazards identification

Physical state	: Solid. [Paste.]
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	: WARNING! CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER. The hazards described in this MSDS refer to the possible presence of abrasive in certain Polishing Paste Bars. Avoid exposure - obtain special instructions before use. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Risk of cancer depends on duration and level of exposure. Wash thoroughly after handling.
Potential acute health effects	
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin	: No known significant effects or critical hazards.
Eyes	: No known significant effects or critical hazards.
Potential chronic health effects	
Chronic effects	: Contains material that can cause target organ damage.
Carcinogenicity	: Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Target organs	: Contains material which causes damage to the following organs: lungs, upper respiratory tract.
Over-exposure signs/symptoms	
Inhalation	: No specific data.
Ingestion	: No specific data.

2. Hazards identification

- Skin** : No specific data.
- Eyes** : No specific data.
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Silica crystalline, quartz	14808-60-7	<100
Paraffin wax	8002-74-2	2.5 - 10

Canada

Name	CAS number	%
Silica crystalline, quartz	14808-60-7	<100
Paraffin wax	8002-74-2	2.5 - 10

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

- Flammability of the product** : No specific fire or explosion hazard.
- Extinguishing media**
 - Suitable** : Use an extinguishing agent suitable for the surrounding fire.
 - Not suitable** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : Keep unnecessary and unprotected personnel from entering. Provide adequate ventilation. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

United States	
Product name Silica crystalline, quartz	Exposure limits ACGIH TLV (United States, 1/2008). TWA: 0.025 mg/m ³ 8 hour(s). Form: Respirable fraction OSHA PEL Z3 (United States, 9/2005). TWA: 10 mg/m ³ 8 hour(s). Form: Respirable TWA: 30 mg/m ³ 8 hour(s). Form: Total dust. TWA: 250 mppcf 8 hour(s). Form: Respirable NIOSH REL (United States, 12/2001). TWA: 0.05 mg/m ³ 10 hour(s).
Paraffin wax	ACGIH TLV (United States, 1/2008). TWA: 2 mg/m ³ 8 hour(s). Form: Fume NIOSH REL (United States, 12/2001). TWA: 2 mg/m ³ 10 hour(s). Form: Fume OSHA PEL 1989 (United States, 3/1989). TWA: 2 mg/m ³ 8 hour(s).

Canada	
Product name Silica crystalline, quartz	Exposure limits CA Alberta Provincial (Canada, 10/2006). 8 hrs OEL: 0.1 mg/m ³ 8 hour(s). Form: Respirable particulate CA Quebec Provincial (Canada, 12/2006). TWAEV: 0.1 mg/m ³ 8 hour(s). Form: Respirable dust. CA British Columbia Provincial (Canada, 7/2007). TWA: 0.025 mg/m ³ 8 hour(s). Form: Respirable
Paraffin wax	CA Alberta Provincial (Canada, 10/2006). 8 hrs OEL: 2 mg/m ³ 8 hour(s). Form: Fume CA British Columbia Provincial (Canada, 7/2007). TWA: 2 mg/m ³ 8 hour(s). Form: Fume CA Ontario Provincial (Canada, 3/2007).

8 . Exposure controls/personal protection

TWAEV: 2 mg/m³ 8 hour(s). Form: fume
CA Quebec Provincial (Canada, 12/2006).
 TWAEV: 2 mg/m³ 8 hour(s). Form: fume

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Engineering measures** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

- Eyes** : Safety glasses.
- Skin** : Lab coat.
- Respiratory** : A respirator is not needed under normal and intended conditions of use.
- Hands** : Natural rubber (latex).

Personal protective equipment (Pictograms)



- HMIS Code/Personal protective equipment** : B
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

- Physical state** : Solid. [Paste.]
- Flash point** : Closed cup: 151°C (303.8°F) [Pensky-Martens.]
- Auto-ignition temperature** : 300°C (572°F)
- Color** : Gray.
- Solubility** : Insoluble in the following materials: cold water and hot water.

10 . Stability and reactivity

- Stability** : The product is stable.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : Avoid exposure - obtain special instructions before use.
- Materials to avoid** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Acute toxicity

- Inhalation** : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.
Skin : No known significant effects or critical hazards.
Eyes : No known significant effects or critical hazards.

Carcinogenicity

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Silica crystalline, quartz	A2	2A	-	+	Proven.	-

12 . Ecological information

- Environmental effects** : No known significant effects or critical hazards.

13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

Regulatory information

- DOT/ TDG / IMDG/ IATA** : Not regulated.

15 . Regulatory information

United States

- HCS Classification** : Carcinogen
Target organ effects
- U.S. Federal regulations** : **United States inventory (TSCA 8b)**: All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Paraffin wax; Silica crystalline, quartz
SARA 311/312 MSDS distribution - chemical inventory - hazard identification
Paraffin wax: Immediate (acute) health hazard; Silica crystalline, quartz: Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean Air Act (CAA) 112 accidental release prevention No products were found.
Clean Air Act (CAA) 112 regulated flammable substances No products were found.
Clean Air Act (CAA) 112 regulated toxic substances No products were found.

15 . Regulatory information

- State regulations**
- Connecticut Carcinogen Reporting:** None of the components are listed.
 - Connecticut Hazardous Material Survey:** None of the components are listed.
 - Florida substances:** None of the components are listed.
 - Illinois Chemical Safety Act** None of the components are listed.
 - Illinois Toxic Substances Disclosure to Employee Act** None of the components are listed.
 - Louisiana Reporting:** None of the components are listed.
 - Louisiana Spill:** None of the components are listed.
 - Massachusetts Spill:** None of the components are listed.
 - Massachusetts Substances:** The following components are listed: Silica crystalline, quartz;Paraffin wax
 - Michigan Critical Material:** None of the components are listed.
 - Minnesota Hazardous Substances:** None of the components are listed.
 - New Jersey Hazardous Substances:** The following components are listed: Silica crystalline, quartz
 - New Jersey Spill:** None of the components are listed.
 - New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.
 - New York Acutely Hazardous Substances:** None of the components are listed.
 - New York Toxic Chemical Release Reporting:** None of the components are listed.
 - Pennsylvania RTK Hazardous Substances:** The following components are listed: Silica crystalline, quartz;Paraffin wax
 - Rhode Island Hazardous Substances:** None of the components are listed.

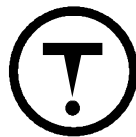
California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Silica crystalline, quartz	Yes.	No.	No.	No.

Canada

- WHMIS (Canada)** : Class D-2A: Material causing other toxic effects (Very toxic).



Canadian lists

- CEPA Toxic substances:** None of the components are listed.
- Canadian ARET:** None of the components are listed.
- Canadian NPRI:** None of the components are listed.
- Alberta Designated Substances:** None of the components are listed.
- Ontario Designated Substances:** None of the components are listed.
- Quebec Designated Substances:** None of the components are listed.

Canada inventory

- : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

- International lists** : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

Label requirements : CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
The hazards described in this MSDS refer to the possible presence of abrasive in certain Polishing Paste Bars.

Hazardous Material Information System (U.S.A.) :

Health	*	2
Fire hazard		1
Physical Hazard		0
Personal protection		B

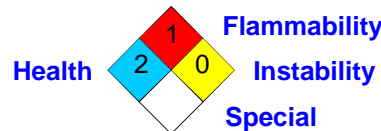
HAZARD RATINGS

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) :



References : ANSI Z400.5, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.