1. Product and company identification

Product identifier

Trade name: Power wire brushes with carbon steel

Relevant identified uses of the substance or mixture and uses advised against

General use: Material removal and/or surface finishing.
For industrial purposes only

Details of the supplier of the safety data sheet

Company name: PFERD INC.
Street/POB-No.: 9201 W. Heather Ave.
Postal Code, city: Milwaukee, WI 53224, USA
WWW: www.pferdusa.com
E-mail: sales@pferdusa.com
Telephone: 262-509-5614
Telefax: 262-255-2840
Dept. responsible for information: 1-800-342-9015

Company name: PFERD CANADA INC.
Street/POB-No.: 5570 McAdam Road
Postal Code, city: Mississauga, Ontario L4Z 1P1, Canada
WWW: www.pferdusa.com
E-mail: sales@pferdcanada.ca
Telephone: (905) 501-1555
Telefax: (905) 501-1554
Dept. responsible for information: 1-866-245-1555

Emergency phone number

USA/Canada: 1-800-255-3924

2. Hazards identification

Emergency overview

Appearance: Form: solid
Color: gray-black
Odor: odorless
Classification: Article not subject to hazard labeling or classification.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

Mechanical processing can produce particles and dust. Inhalation of dust may cause irritation of the respiratory system. Dust contact with the eyes can lead to mechanical irritation. In the case of the formation of dust: Harmful by inhalation and if swallowed. see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterisation: The components listed below represent the chemical composition of the wire material:
4. First aid measures

In case of inhalation: In the case of the formation of dust: Provide fresh air. If you feel unwell, seek medical advice.

Following skin contact: In the case of the formation of dust: Remove residues with soap and water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After eye contact: In the case of the formation of dust: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of eye irritation consult an ophthalmologist.

After swallowing: In the case of the formation of dust: Rinse mouth with water. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Inhalation of dust may cause irritation of the respiratory system. Dust contact with the eyes can lead to mechanical irritation.

In the case of the formation of dust: Harmful by inhalation and if swallowed.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range: not combustible

Auto-ignition temperature: No data available

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Specific hazards arising from the chemical

On heating or in case of fire toxic gases may form.

Protective equipment and precautions for firefighters:
Wear self-contained breathing apparatus. Wear suitable protective clothing.
6. Accidental release measures

Personal precautions:
For mechanical processing: Avoid generation of dust. Do not inhale substance. 
Provide adequate ventilation. Wear appropriate protective equipment. 
Avoid contact with the substance. Keep unprotected people away.

Environmental precautions:
Do not allow to penetrate into soil, waterbodies or drains.
In case of release, notify competent authorities.

Methods for clean-up:
Take up mechanically, placing in appropriate containers for disposal.

7. Handling and storage

Handling
Advises on safe handling:
Provide adequate ventilation, and local exhaust as needed.
Avoid generation of dust. Do not inhale substance.
Wear appropriate protective equipment.
When using do not eat, drink or smoke.
Wash hands before breaks and after work.

Storage
Requirements for storerooms and containers:
Keep container tightly closed and dry.
### 8. Exposure controls / personal protection

**Exposure guidelines**

**Occupational exposure limit values:**

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Designation</th>
<th>Type</th>
<th>Limit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-89-6 Iron</td>
<td>USA: ACGIH: TWA</td>
<td>10 mg/m³ smoke, dust</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: OSHA: TWA</td>
<td>10 mg/m³ smoke</td>
<td></td>
</tr>
<tr>
<td>7439-96-5 Manganese</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>0.2 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>0.2 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>0.2 mg/m³ Smoke, inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA: Ceiling</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>0.02 mg/m³ respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>0.1 mg/m³ inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: NIOSH: STEL</td>
<td>3 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>7440-21-3 Silicon</td>
<td>Canada, Ontario: OEL TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>10 mg/m³ (inhalable fraction)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>10 mg/m³ inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>5 mg/m³ (respirable fraction)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: OSHA: TWA</td>
<td>15 mg/m³ inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: OSHA: TWA</td>
<td>5 mg/m³ (respirable fraction)</td>
<td></td>
</tr>
<tr>
<td>7440-47-3 Chromium</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: OSHA: TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>7440-44-0 Carbon</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>10 mg/m³ Dust limit value inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>3 mg/m³ Dust limit value respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>10 mg/m³ Dust limit value inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Ontario: OEL TWA</td>
<td>10 mg/m³ Dust limit value inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Ontario: OEL TWA</td>
<td>3 mg/m³ Dust limit value respirable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>10 mg/m³ Dust limit value inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: OSHA: TWA</td>
<td>15 mg/m³ inhalable fraction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: OSHA: TWA</td>
<td>5 mg/m³ (respirable fraction)</td>
<td></td>
</tr>
<tr>
<td>7704-34-9 Sulfur</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>7723-14-0 phosphorus</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>7439-92-1 Lead</td>
<td>Canada, Alberta: OEL 8 hour</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, BC: OEL TWA</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Ontario: OEL TWA</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Canada, Québec: VEMP</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: ACGIH: TWA</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: NIOSH: TWA</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>USA: OSHA: TWA</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>
Biological limit values:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Designation</th>
<th>Type</th>
<th>Limit value</th>
<th>Parameter</th>
<th>Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>7439-92-1</td>
<td>Lead</td>
<td>USA: ACGIH-BEI, blood</td>
<td>30 µg/100mL</td>
<td>Lead in blood</td>
<td>no restriction</td>
</tr>
</tbody>
</table>

Engineering controls

In the case of the formation of dust: Provide good ventilation and/or an exhaust system in the work area.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection
For mechanical processing: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection
For mechanical processing: Wear suitable protective clothing and shoes.

Respiratory protection:
In case of dust formation:
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General hygiene considerations:
For mechanical processing: Do not inhale substance.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke. Change contaminated clothing.
Wash hands before breaks and after work.
Work place should be equipped with a shower and an eye rinsing apparatus.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Form: solid  
Color: gray-black

Odor: odorless

pH value: No data available

Melting point/freezing point: 2499.98 - 2649.92 °F (1371.1 - 1454.4 °C)

Initial boiling point and boiling range: No data available

Flash point/flash point range: not combustible

Evaporation rate: No data available

Flammability: non-flammable

Explosion limits: No data available

Vapor pressure: No data available

Vapor density: No data available

Density: No data available

Water solubility: insoluble

Partition coefficient: n-octanol/water: No data available
10. Stability and reactivity

Reactivity: no data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

Conditions to avoid: No data available

Incompatible materials: Acids

Hazardous decomposition products:
On heating or in case of fire toxic gases may form.

11. Toxicological information

Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.
Acute toxicity (oral): Lack of data.
Acute toxicity (dermal): Lack of data.
Acute toxicity (inhalative): Lack of data.
Skin corrosion/irritation: Lack of data.
Eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Lack of data.
Germ cell mutagenicity/Genotoxicity: Lack of data.
Carcinogenicity: Lack of data.
Reproductive toxicity: Lack of data.
Effects on or via lactation: Lack of data.
Specific target organ toxicity (single exposure): Lack of data.
Specific target organ toxicity (repeated exposure): Lack of data.
Aspiration hazard: Lack of data.

Other information:
Chronic toxicity carcinogenic effect:
Information about Chromium:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed
Symptoms

In case of inhalation:
Inhalation of dust may cause irritation of the respiratory system. Cough, shortage of breath. Harmful by inhalation. Lung damage is possible in a chronic situation.

In case of ingestion:
Iron: Absorption can lead to kidney and liver damage. May be harmful if swallowed. Vomiting, Diarrhea.

After contact with skin:
In the case of the formation of dust: Can be irritating because of mechanical abrasion.
After eye contact: Dust contact with the eyes can lead to mechanical irritation.

12. Ecological information

Ecotoxicity
Further details: No data available

Mobility in soil
No data available

Persistence and degradability
Further details: No data available

Additional ecological information
General information: Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product
Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging
Recommendation: Dispose of waste according to applicable legislation. Packing can be recycled or disposed of.

14. Transport information

USA: Department of Transportation (DOT)
Proper shipping name: Not restricted

Canada: Transportation of Dangerous Goods (TDG)
Shipping name: Not restricted

Sea transport (IMDG)
Proper shipping name: Not restricted
Marine pollutant: no
Air transport (IATA)
Proper shipping name: Not restricted

Further information
No dangerous good in sense of these transport regulations.

15. Regulatory information

National regulations - Canada
No data available

National regulations - U.S. Federal Regulations

Product: This product is an article as defined by TSCA regulations, and is exempt from TSCA inventory listing requirements.

Manganese: Other Environmental Laws:
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
NIOSH Recommendations:
Occupational Health Guideline: 0379*

Silicon: NIOSH Recommendations:
Occupational Health Guideline: 0554

Chromium: Carcinogen Status:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed
Clean Water Act:
Priority Pollutant: yes
Other Environmental Laws:
CERCLA: RQ 5000 lbs.
RCRA Hazardous Wastes: Code D007
RCRA Groundwater Monitoring: Methods 6010, 7190, 719 / PQL 70, 500, 10
SARA Title III Section 313, Toxic Release: Conc. 0.1% / Threshold Standard
NIOSH Recommendations:
Occupational Health Guideline: 0141

Carbon: NIOSH Recommendations:
Occupational Health Guideline: 0307

Vanadium: Other Environmental Laws:
RCRA Groundwater Monitoring: Methods 6010, 7910, 791 / PQL 80, 2000, 40

phosphorus: Clean Air Act:
Hazardous Air Pollutants: Code X
Clean Water Act:
Hazardous Substances: RQ 1 lbs.
Other Environmental Laws:
CERCLA: RQ 1 lbs.
Marine Pollutant: listed as severe pollutant.
SARA Title III Section 302, EHS: TPQ 100 lbs. / RQ 1 lbs.
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard
NIOSH Recommendations:
Occupational Health Guideline: 0507
16. Other information

Hazard rating systems:

NFPA Hazard Rating:
Health: 0 (Minimal)
Fire: 0 (Minimal)
Reactivity: 0 (Minimal)

HMIS Version III Rating:
Health: 0 (Minimal)
Flammability: 0 (Minimal)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

Reason of change: Changes in section 1: emergency phone number

Date of first version: 22/4/2016

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products.