according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

 Revision date:
 Nov/7/2019
 Date of print:
 Nov/11/2019

 Version:
 5
 Language: en-US,CA
 Page:
 1 of 11

1. Product and company identification

Product identifier

Trade name: Power wire brushes with carbon steel and ecap carbon steel

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

General use: surface treatment/cleaning.

For industrial purposes only

Details of the supplier of the safety data sheet

Company name:

PFERD INC. PFERD CANADA INC.

Street/POB-No.: 9201 W. Heather Ave. Street/POB-No.: 5570 McAdam Road

Postal Code, city: Milwaukee, WI 53224, Postal Code, city: Mississauga, Ontario L4Z 1P1,

USA Canada

WWW: www.pferdusa.com
E-mail: sales@pferdusa.com
E-mail: sales@pferdusa.com
E-mail: sales@pferdcanada.ca
Telephone: 1-800-342-9015
Telefax: 262-255-2840
Telefax: (905) 501-1554

Department responsible for information: Department responsible for information: 1-866-245-1555

1-800-342-9015

Emergency phone number

USA/Canada: 1-800-255-3924

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F (20 °C) and 101.3 kPa: solid

Color: Gray-black

Odorless

Classification: This material is classified as not hazardous.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication

Standard (29 CFR 1910.1200) and WHMIS 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

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

 Revision date:
 Nov/7/2019
 Date of print:
 Nov/11/2019

 Version:
 5
 Language: en-US,CA
 Page:
 2 of 11

3. Composition / Information on ingredients

Chemical characterization: The components listed below represent the chemical composition of the wire material: Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 7439-89-6	Iron	95 - 99 %	not classified
CAS 7439-96-5	Manganese	<= 1.65 %	not classified
CAS 7440-21-3	Silicon	<= 1.6 %	not classified
CAS 7440-47-3	Chromium	<= 1.5 %	not classified
CAS 7440-44-0	Carbon	<= 1.1 %	not classified
CAS 7440-62-2	Vanadium	<= 0.35 %	not classified
CAS 7704-34-9	Sulfur	<= 0.05 %	Skin Irritation - Category 2.
CAS 7723-14-0	Phosphorus	<= 0.04 %	not classified
CAS 7439-92-1	Lead	<= 0.005 %	Reproductive toxicity - Category 1A. Toxic to Reproduction (Lactation). Specific Target Organ Toxicity (Repeated Exposure) - Category 1.

Additional information:

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

The product might contain: Polyurethane, cured.

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/effects, 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.

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

 Revision date:
 Nov/7/2019
 Date of print:
 Nov/11/2019

 Version:
 5
 Language: en-US,CA
 Page:
 3 of 11

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.

Additional information: Do not allow fire water to penetrate into surface or ground water.

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

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.

Avoid generation of dust. Do not inhale substance.

Wear appropriate protective equipment.

Avoid contact with skin and eyes. Take off contaminated clothing and wash it before reuse.

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.

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

Revision date: Nov/7/2019 Date of print: Nov/11/2019 Version: Language: en-US,CA Page:



4 of 11

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Туре	Limit value
	Power wire brushes with carbon steel and ecap carbon steel	Canada, Alberta: OEL 8 hour	10 mg/m³ (Dust limit value, inhalable fraction)
		Canada, Alberta: OEL 8 hour	3 mg/m³ (Dust limit value, respirable fraction)
		Canada, BC: OEL TWA	10 mg/m³ (Dust limit value, inhalable fraction)
		Canada, Ontario: OEL TWA	10 mg/m³
		Canada, Ontario: OEL TWA	(Dust limit value, inhalable fraction) 3 mg/m³
		Canada, Québec: VEMP	(Dust limit value, respirable fraction) 10 mg/m³
			(Dust limit value, inhalable fraction)
		USA: ACGIH: TWA	10 mg/m³ (Dust limit value, inhalable fraction)
		USA: ACGIH: TWA	3 mg/m³ (Dust limit value, respirable fraction)
		USA: OSHA: TWA	15 mg/m³
		USA: OSHA: TWA	(Dust limit value, inhalable fraction) 5 mg/m³ (Dust limit value, respirable fraction)
7439-89-6	Iron	USA: ACGIH: TWA USA: OSHA: TWA	10 mg/m³ (smoke, dust) 10 mg/m³ (Smoke)
7439-96-5	Manganese	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, BC: OEL TWA Canada, Québec: VEMP	0.2 mg/m³ 0.02 mg/m³ (inhalable fraction) 0.2 mg/m³ (respirable fraction) 0.2 mg/m³ (Smoke, inhalable fraction)
7440-21-3	Silicon	Canada, Ontario: OEL TWA Canada, Québec: VEMP USA: NIOSH: TWA USA: NIOSH: TWA USA: OSHA: TWA USA: OSHA: TWA	10 mg/m³ 10 mg/m³ (inhalable fraction) 10 mg/m³ inhalable fraction 5 mg/m³ (respirable fraction) 15 mg/m³ inhalable fraction 5 mg/m³ (respirable fraction)
7440-47-3	Chromium	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Québec: VEMP USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA	0.5 mg/m³ 0.5 mg/m³ 0.5 mg/m³ 0.5 mg/m³ (inhalable fraction) 0.5 mg/m³ 0.5 mg/m³

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

 Revision date:
 Nov/7/2019
 Date of print:
 Nov/11/2019

 Version:
 5
 Language: en-US,CA
 Page:
 5 of 11

CAS No.	Designation	Туре	Limit value
7440-44-0	Carbon	Canada, Alberta: OEL 8 hour	10 mg/m³ (Dust limit value, inhalable fraction)
		Canada, Alberta: OEL 8 hour	3 mg/m³ (Dust limit value, respirable fraction)
		Canada, BC: OEL TWA	10 mg/m³
		Canada, Ontario: OEL TWA	(Dust limit value, inhalable fraction) 10 mg/m³ (Dust limit value, inhalable fraction)
		Canada, Ontario: OEL TWA	(Dust limit value, inhalable fraction) 3 mg/m³
		Canada, Québec: VEMP	(Dust limit value, respirable fraction) 10 mg/m³ (Dust limit value, inhalable fraction)
		USA: ACGIH: TWA	10 mg/m³ (Dust limit value, inhalable fraction)
		USA: ACGIH: TWA	3 mg/m³ (Dust limit value, respirable fraction)
		USA: OSHA: TWA USA: OSHA: TWA	15 mg/m³ inhalable fraction 5 mg/m³ (respirable fraction)
7704-34-9	Sulfur	Canada, Alberta: OEL 8 hour	10 mg/m³
7723-14-0	Phosphorus	Canada, Alberta: OEL 8 hour Canada, Québec: VEMP USA: NIOSH: TWA	0.1 mg/m³ 0.1 mg/m³ 0.1 mg/m³
7439-92-1	Lead	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Ontario: OEL TWA Canada, Québec: VEMP	0.05 mg/m³ 0.05 mg/m³ 0.05 mg/m³ 0.05 mg/m³
		USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA	0.05 mg/m³ 0.05 mg/m³ 0.05 mg/m³

Biological limit values:

CAS No.	Designation	Туре	Limit value	Parameter	Sampling
7439-92-1	Lead	USA: ACGIH-BEI, blood	200 μg/L	Lead in blood	no restriction

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.

For mechanical processing: Protective gloves according to OSHA Standard - 29 CFR:

1910.138.

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

Revision date: Nov/7/2019
Version: 5 Language: en-US,CA

Date of print: Nov/11/2019

Page: Nov/11/2019

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. Take off contaminated clothing and wash it before

reuse.

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: Physical state at 68 °F (20 °C) and 101.3 kPa: solid

Color: Gray-black

Odor: Odorless

Odor threshold: No data available

pH value: not applicable

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 No data available Density:

Water solubility: Insoluble

Partition coefficient: n-octanol/water:

Auto-ignition temperature:

No data available

No data available

No data available

No data available

Additional information: 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

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

Revision date: Nov/7/2019

Version: Language: en-US,CA Page:

Date of print: Nov/11/2019 7 of 11

Incompatible materials: Acids Hazardous decomposition products:

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

Thermal decomposition: No data available

11. Toxicological information

Toxicological tests

Toxicological effects: Acute toxicity (oral): Lack of data.

> Acute toxicity (dermal): Lack of data. Acute toxicity (inhalative): Lack of data. Skin corrosion/irritation: Lack of data.

Serious 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 Information about Lead: IARC Rating: Group 2B 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.

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

 Revision date:
 Nov/7/2019
 Date of print:
 Nov/11/2019

 Version:
 5
 Language: en-US,CA
 Page:
 8 of 11

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.

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

 Revision date:
 Nov/7/2019
 Date of print:
 Nov/11/2019

 Version:
 5
 Language: en-US,CA
 Page:
 9 of 11

15. Regulatory information

National regulations - U.S. Federal Regulations

Iron: TSCA Inventory: listed

TSCA HPVC: not listed

Manganese: TSCA Inventory: listed

TSCA HPVC: not listed Other Environmental Laws:

SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard

NIOSH Recommendations:

Occupational Health Guideline: 0379*

Silicon: TSCA Inventory: listed

TSCA HPVC: not listed NIOSH Recommendations:

Occupational Health Guideline: 0554

Chromium: TSCA Inventory: listed

TSCA HPVC: not listed 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: TSCA Inventory: listed

TSCA HPVC: not listed NIOSH Recommendations:

Occupational Health Guideline: 0307

Vanadium: TSCA Inventory: listed

TSCA HPVC: not listed Other Environmental Laws:

RCRA Groundwater Monitoring: Methods 6010, 7910, 791 / PQL 80, 2000, 40

Sulfur: TSCA Inventory: listed

TSCA HPVC: not listed

according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

Revision date: Nov/7/2019 Date of print: Nov/11/2019 Version: Language: en-US,CA Page: 10 of 11

Phosphorus: TSCA Inventory: listed

TSCA HPVC: not listed

Clean Air Act:

Hazardous Air Pollutants: yes

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

TSCA Inventory: listed Lead:

TSCA HPVC: not listed Carcinogen Status: IARC Rating: Group 2B OSHA Carcinogen: listed

NTP Rating: listed

Clean Air Act:

Hazardous Air Pollutants: yes

Clean Water Act: Priority Pollutant: yes Other Environmental Laws: CERCLA: RQ 10 lbs.

RCRA Hazardous Wastes: Code D008

RCRA Groundwater Monitoring: Methods 6010, 7420, 742 / PQL 40, 1000, 10 SARA Title III Section 313, Toxic Release: Conc. 0.1% / Threshold 100

NIOSH Recommendations:

Occupational Health Guideline: 0368*

National regulations - U.S. State Regulations

Lead: California Proposition 65: developmental, female, male

National regulations - Canada

No data available

16. Other information

Hazard rating systems:



NFPA Hazard Rating: Health: 1 (Slight) Fire: 0 (Minimal) Reactivity: 0 (Minimal) HMIS Version III Rating:

Health: 1 (Slight) - Chronic effects Flammability: 0 (Minimal) Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor



according to 29 CFR 1910.1200 and ANSI standard Z400.1-2010

Power wire brushes with carbon steel and ecap carbon steel

Product number 020

Revision date: Nov/7/2019 Version: 5

5 Language: en-US,CA

Date of print: Nov/11/2019
Page: 11 of 11

Reason of change: Changes in section 2: Classification, labeling

Date of first version: Apr/22/2016

Department issuing data sheet

Contact person: see section 1: Department 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.