

SAFETY DATA SHEET

according to WHMIS 2015 and ANSI Z400.1-2010



Power Wire Brushes - Stainless Steel

Product number 021

Revision date: 14/12/2016
Version: 3

Language: en-CA,US

Date of print: 19/12/2016
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1. Product and company identification

Product identifier

Trade name: Power Wire Brushes - Stainless 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

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.
May cause sensitisation especially in sensitive humans.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterisation: The components listed below represent the chemical composition of the wire material:

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Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 7439-89-6	Iron	< 90 %	not applicable
CAS 7440-02-0	Nickel	< 35 %	Sensitization - skin 1. Carcinogenicity 2. Specific Target Organ Toxicity (Repeated Exposure) 1.
CAS 7440-47-3	Chromium	< 30 %	not applicable
CAS 7439-96-5	Manganese	< 15 %	not applicable
CAS 7440-21-3	Silicon	< 6 %	not applicable
CAS 7440-50-8	Copper	< 5 %	not applicable
CAS 7439-98-7	Molybdenum	< 4 %	not applicable
CAS 7429-90-5	Aluminium	<= 2 %	not applicable
CAS 7440-44-0	Carbon	< 1.2 %	not applicable
CAS 7440-62-2	Vanadium	< 0.5 %	not applicable
CAS 7727-37-9	Nitrogen	< 0.11 %	Compressed Gas.
CAS 7723-14-0	phosphorus	< 0.05 %	not applicable
CAS 7704-34-9	Sulfur	< 0.04 %	Skin Irritation 2.

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

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. May cause sensitisation especially in sensitive humans.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

not combustible

Auto-ignition temperature: No data available

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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:

For mechanical processing: 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.

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8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value		
7439-89-6	Iron	USA: ACGIH: TWA	10 mg/m ³ smoke, dust		
		USA: OSHA: TWA	10 mg/m ³ smoke		
7440-02-0	Nickel	Canada, Alberta: OEL 8 hour	1.5 mg/m ³ metal		
		Canada, BC: OEL TWA	0.05 mg/m ³		
		Canada, Ontario: OEL TWA	1 mg/m ³ inhalable fraction (Metal)		
		Canada, Québec: VEMP	1 mg/m ³ (Métal)		
		USA: ACGIH: TWA	0.1 mg/m ³ (compounds, soluble; inhalable fraction)		
		USA: ACGIH: TWA	0.2 mg/m ³ (compounds, insoluble; inhalable fraction)		
7440-47-3	Chromium	USA: ACGIH: TWA	1.5 mg/m ³ (metal, inhalable fraction)		
		USA: NIOSH: TWA	0.015 mg/m ³		
		USA: OSHA: TWA	1 mg/m ³ (Nickel and compounds)		
		USA: OSHA: TWA	1 mg/m ³		
7440-47-3	Chromium	Canada, Alberta: OEL 8 hour	0.5 mg/m ³		
		Canada, BC: OEL TWA	0.5 mg/m ³		
		Canada, Québec: VEMP	0.5 mg/m ³		
		USA: ACGIH: TWA	0.5 mg/m ³		
		USA: NIOSH: TWA	0.5 mg/m ³		
		USA: OSHA: TWA	0.5 mg/m ³		
7439-96-5	Manganese	Canada, Alberta: OEL 8 hour	0.2 mg/m ³		
		Canada, BC: OEL TWA	0.2 mg/m ³		
		Canada, Québec: VEMP	0.2 mg/m ³ Smoke, inhalable fraction		
		OSHA: Ceiling	5 mg/m ³		
		USA: ACGIH: TWA	0.02 mg/m ³ respirable fraction		
		USA: ACGIH: TWA	0.1 mg/m ³ inhalable fraction		
7440-21-3	Silicon	USA: NIOSH: STEL	3 mg/m ³		
		USA: NIOSH: TWA	1 mg/m ³		
		Canada, Ontario: OEL TWA	10 mg/m ³		
		Canada, Québec: VEMP	10 mg/m ³ (inhalable fraction)		
		USA: NIOSH: TWA	10 mg/m ³ inhalable fraction		
7440-21-3	Silicon	USA: NIOSH: TWA	5 mg/m ³ (respirable fraction)		
		USA: OSHA: TWA	15 mg/m ³ inhalable fraction		
		USA: OSHA: TWA	5 mg/m ³ (respirable fraction)		
		7440-50-8	Copper	USA: OSHA: TWA	5 mg/m ³ (respirable fraction)
				Canada, Alberta: OEL 8 hour	0.2 mg/m ³ Smoke
Canada, Alberta: OEL 8 hour	1 mg/m ³ Dusts and mist				
Canada, BC: OEL TWA	0.2 mg/m ³ Smoke				
Canada, BC: OEL TWA	1 mg/m ³				
7440-50-8	Copper	Canada, Québec: VEMP	0.2 mg/m ³ (Smoke, calculated as Cu)		
		Canada, Québec: VEMP	1 mg/m ³ (Dusts and mist, calculated as Cu)		
		USA: ACGIH: TWA	0.2 mg/m ³ Smoke		
		USA: ACGIH: TWA	1 mg/m ³ Dusts and mist calculated as Cu		
		USA: NIOSH: TWA	1 mg/m ³		
		USA: OSHA: TWA	0.1 mg/m ³ (Smoke; calculated as Cu)		
		USA: OSHA: TWA	1 mg/m ³ Dusts and mist calculated as Cu		

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CAS No.	Designation	Type	Limit value
7439-98-7	Molybdenum	Canada, Alberta: OEL 8 hour	0.5 mg/m ³ compounds, soluble; respirable fraction
		Canada, Alberta: OEL 8 hour	10 mg/m ³ (Metal insoluble compounds total)
		Canada, Alberta: OEL 8 hour	3 mg/m ³ (metal, compounds, insoluble; respirable fraction)
		Canada, BC: OEL TWA	0.5 mg/m ³ compounds, soluble; respirable fraction
		Canada, BC: OEL TWA	10 mg/m ³ metal and compounds, insoluble; inhalable fraction
		Canada, BC: OEL TWA	3 mg/m ³ metal and compounds, insoluble; respirable fraction
		Canada, Québec: VEMP	10 mg/m ³ compounds, insoluble
		Canada, Québec: VEMP	5 mg/m ³ compounds, soluble
		USA: ACGIH: TWA	0.5 mg/m ³ soluble; inhalable fraction
		USA: ACGIH: TWA	10 mg/m ³ insoluble; inhalable fraction
		USA: ACGIH: TWA	3 mg/m ³ insoluble; respirable fraction
		USA: OSHA: TWA	15 mg/m ³
		USA: OSHA: TWA	5 mg/m ³
7429-90-5	Aluminium	Canada, Alberta: OEL 8 hour	10 mg/m ³ (Metal Dust)
		Canada, Alberta: OEL 8 hour	5 mg/m ³ (Pyro powders, calculated as Al)
		Canada, BC: OEL TWA	1 mg/m ³
		Canada, Québec: VEMP	10 mg/m ³ Metals
		NIOSH: Ceiling	5 mg/m ³ (inhalable fraction)
		USA: ACGIH: TWA	1 mg/m ³
		USA: NIOSH: TWA	10 mg/m ³ (inhalable fraction)
		USA: NIOSH: TWA	5 mg/m ³ (inhalable fraction)
		USA: OSHA: TWA	15 mg/m ³ (inhalable fraction)
USA: OSHA: TWA	5 mg/m ³ (respirable fraction)		
7440-44-0	Carbon	Canada, Alberta: OEL 8 hour	10 mg/m ³ Dust limit value inhalable fraction
		Canada, Alberta: OEL 8 hour	3 mg/m ³ Dust limit value respirable fraction
		Canada, BC: OEL TWA	10 mg/m ³ Dust limit value inhalable fraction
		Canada, Ontario: OEL TWA	10 mg/m ³ Dust limit value inhalable fraction
		Canada, Ontario: OEL TWA	3 mg/m ³ Dust limit value respirable fraction
		Canada, Québec: VEMP	10 mg/m ³ Dust limit value inhalable fraction
		USA: OSHA: TWA	15 mg/m ³ inhalable fraction
USA: OSHA: TWA	5 mg/m ³ (respirable fraction)		
7723-14-0	phosphorus	Canada, Alberta: OEL 8 hour	0.1 mg/m ³
		Canada, Québec: VEMP	0.1 mg/m ³
		USA: NIOSH: TWA	0.1 mg/m ³
7704-34-9	Sulfur	Canada, Alberta: OEL 8 hour	10 mg/m ³

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.

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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.
- Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. 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
Odor threshold:	No data available
pH value:	No data available
Melting point/freezing point:	No data available
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
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	No data available

10. Stability and reactivity

Reactivity:	no data available
Chemical stability:	Stable under recommended storage conditions.

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Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

Conditions to avoid: No data available

Incompatible materials: No data available

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.
Eye damage/irritation: Lack of data.
Sensitisation to the respiratory tract: Lack of data.
Skin sensitisation: Lack of data. May cause sensitisation especially in sensitive humans.
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 Nickel:
IARC Rating: Group 2B
OSHA Carcinogen: not listed
NTP Rating: listed
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. Harmful by inhalation.
Lung damage is possible in a chronic situation. Cough, shortage of breath.
In case of ingestion: May be harmful if swallowed.
After contact with skin: In the case of the formation of dust: May cause irritations.
After eye contact: Dust contact with the eyes can lead to mechanical irritation.

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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

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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.
Nickel:	Carcinogen Status: IARC Rating: Group 2B OSHA Carcinogen: not listed NTP Rating: listed Clean Water Act: Priority Pollutant: yes Other Environmental Laws: CERCLA: RQ 100* lbs. RCRA Groundwater Monitoring: Methods 6010, 7520 / PQL 50, 400 SARA Title III Section 313, Toxic Release: Conc. 0.1% / Threshold Standard NIOSH Recommendations: Occupational Health Guideline: 0445*
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
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
Copper:	Clean Water Act: Priority Pollutant: yes Other Environmental Laws: CERCLA: RQ 5000* lbs. Marine Pollutant: listed as severe pollutant. RCRA Groundwater Monitoring: Methods 6010, 7210 / PQL 60, 200 SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard NIOSH Recommendations: Occupational Health Guideline: 0150*
Molybdenum:	NIOSH Recommendations: Occupational Health Guideline: 0433*
Aluminium:	Other Environmental Laws: SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard NIOSH Recommendations: Occupational Health Guideline: 0022

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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

National regulations - U.S. State Regulations

Nickel: California Proposition 65: cancer
Rhode Island HSL: listed

Nitrogen: California Proposition 65 code: not listed
Massachusetts Haz. Substance codes: 4
Pennsylvania Haz. Substance code: -
Washington Air Contaminant: Simple Asphyxiant

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)
Flammability: 0 (Minimal)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

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

Date of first version: 15/1/2016

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.