according to WHMIS 2015 and ANSI Z400.1-2010

Organic Bonded Abrasives, Type II

Material number 011

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1. Product and company identification

Product identifier

Trade name: Organic Bonded Abrasives, Type II

This safety data sheet pertains to the following products:

Mounted Points, resin bond

Cones and plugs, resin bond, aluminum oxide Reinforced Cut-off Wheels (all types/shapes) Reinforced Grinding Wheels (all types/shapes)

Snagging Wheels Cup Wheels

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

General use: Grinding and sanding of different kinds of materials.

For industrial purposes only

Details of the supplier of the safety data sheet

Company name:

PFÉRD 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
Telephone: 262-509-5614
Telefax: 262-255-2840
WWW: www.pferdusa.com
E-mail: sales@pferdusa.com
Telephone: (905) 501-1555
Telefax: (905) 501-1554

Dept. responsible for information: 1-800-342-9015 Dept. responsible for information: 1-866-245-1555

Emergency phone number

USA: 1-800-342-9015 (7:00 a.m.-5:00 p.m. Central Time)

Canada: 1-866-245-1555 (8:00 a.m. - 4:30 p.m. eastern standard time)

2. Hazards identification

Emergency overview

Appearance: Form: solid

Color: varying colors No data available

Classification: Article not subject to hazard labeling or classification.

Regulatory status

Odor:

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.

Harmful if inhaled. Causes serious eye irritation. Causes damage to organs through prolonged or repeated exposure. May cause harm to breast-fed children. Harmful to

aquatic life with long lasting effects. see section 11: Toxicological information

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3. Composition / Information on ingredients

Chemical characterisation: Mounted points, grinding-, cut-off-, and cup-wheels.

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 1344-28-1	Aluminium oxide	< 95 %	not applicable
CAS 409-21-2	Silicon carbide	< 95 %	not applicable
CAS -	synthetic resin, polymerized	< 30 %	not applicable
CAS 1314-23-4	Zirconium dioxide	< 25 %	not applicable
CAS 12068-85-8	Iron disulfide	< 20 %	not applicable
CAS 60304-36-1	Aluminum potassium fluoride	< 20 %	Acute Toxicity 4 (inhalative). Eye Irritation 2A. Toxic to Reproduction (Lactation). Specific Target Organ Toxicity (Repeated Exposure) 1. Aquatic toxicity - chronic 3.
CAS 13775-53-6	Trisodium hexafluoroaluminate (cryolite)	< 15 %	Acute Toxicity 4 (inhalative). Toxic to Reproduction (Lactation). Specific Target Organ Toxicity (Repeated Exposure) 1. Aquatic toxicity - chronic 2.
CAS 65997-17-3	Fibre glass weaves	< 15 %	not applicable
CAS 1308-56-1	Copper iron disulphide	< 10 %	not applicable
CAS 1314-98-3	Zinc sulphide	< 10 %	not applicable
CAS 471-34-1	Calcium carbonate	< 8 %	not applicable
CAS 7773-01-5	Manganese dichloride	< 7 %	Acute Toxicity 4 (oral). Eye Damage 1. Specific Target Organ Toxicity (Repeated Exposure) 2. Aquatic toxicity - chronic 2.
CAS 13463-67-7	Titanium dioxide	< 5 %	Carcinogenicity 2.
CAS 1309-37-1	Diiron trioxide	< 5 %	not applicable
CAS 9002-88-4	Polyethylene	< 5 %	not applicable
CAS 7789-75-5	Calcium fluoride	< 4 %	not applicable
CAS 598-62-9	Manganese carbonate	< 4 %	not applicable
CAS -	fleece	< 3 %	not applicable
CAS -	paper	< 2 %	not applicable
CAS 7782-42-5	Graphite	< 2 %	not applicable
CAS 1308-38-9	Chromium oxide	< 2 %	not applicable
CAS 1312-81-8	Lanthanum oxide	< 1 %	not applicable
CAS 7631-86-9	Silicon dioxide	< 1 %	not applicable
CAS 1309-48-4	Magnesium oxide	< 0.5 %	not applicable
CAS 1314-36-9	yttrium oxide	< 0.5 %	not applicable
CAS 1305-78-8	Calcium oxide	< 0.5 %	Skin Irritation 2. Eye Damage 1. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 14808-60-7	Quartz (SiO2)	< 0.5 %	Carcinogenicity 1A.
CAS 12055-23-1	Hafnium dioxide	< 0.4 %	not applicable

Additional information: The ingredients are embedded in the product.

4. First aid measures

In case of inhalation: Dusts/aerosols: Provide fresh air. If you feel unwell, seek medical advice.

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Following skin contact: Dusts/aerosols: Remove residues with soap and water. In case of skin reactions, consult

a physician.

After eye contact: Dusts/aerosols: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes

holding eyelids apart. Remove contact lenses, if any. In case of eye irritation consult an

ophthalmologist.

After swallowing: Dusts/aerosols: Rinse mouth with water. Give water to drink in small sips. Never give

anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

Most important symptoms and effects, both acute and delayed

Dusts: Causes serious eye irritation. Harmful if inhaled. Can be irritating because of mechanical abrasion.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

No data available

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

At temperatures above 482 °F (250 °C) hazardous decomposition products may be

generated.

Protective equipment and precautions for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

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

6. Accidental release measures

Personal precautions: Avoid generation of dust. Do not inhale substance.

In case of heating: development of gas/vapor possibel.

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.

In case of heating: development of gas/vapor possibel.

Do not inhale substance. Wear appropriate protective equipment. Avoid contact with the

substance.

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Storage

Requirements for storerooms and containers:

Keep container tightly closed and dry. Keep in a cool, well-ventilated place.

Keep only in the original container. Keep away from air. Protect from moisture.

Only trained personnel may be allowed to enter storage area.

Hints on joint storage: Do not store together with oxidizing agents or acids.

Do not store together with food.



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Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Туре	Limit value
1344-28-1	Aluminium oxide	Canada, Alberta: OEL 8 hour Canada, Québec: VEMP USA: OSHA: TWA USA: OSHA: TWA	10 mg/m ³ 10 mg/m ³ (inhalable fraction) 15 mg/m ³ inhalable fraction 5 mg/m ³ (respirable fraction)
409-21-2 S	Silicon carbide	Canada, Alberta: OEL 8 hour	0.1 fibers/cm ³ (fibrous, including whiskers; inhalable fraction)
		Canada, Alberta: OEL 8 hour	10 mg/m ³ (non-fibrous; inhalable fraction)
		Canada, Alberta: OEL 8 hour	3 mg/m³ (non-fibrous; respirable fraction)
		Canada, BC: OEL TWA	0.1 fibers/cm ³ (fibrous, including whiskers)
		Canada, BC: OEL TWA	10 mg/m ³ (non-fibrous; inhalable fraction)
		Canada, BC: OEL TWA	3 mg/m³ (non-fibrous; respirable fraction)
		Canada, Ontario: OEL TWA	0.1 fibers/cm³ (fibrous, including whiskers; inhalable fraction)
		Canada, Ontario: OEL TWA	10 mg/m³ (non-fibrous; inhalable fraction)
		Canada, Ontario: OEL TWA	3 mg/m³ (non-fibrous; respirable fraction)
		Canada, Québec: VEMP	10 mg/m ³ (non-fibrous; inhalable fraction)
		USA: ACGIH: TWA	0.1 fibers/cm³ (fibrous, including whiskers)
		USA: ACGIH: TWA	10 mg/m³ (inhalable fraction; particulate matter containing no asbestos and < 1% crystalline silica)
		USA: ACGIH: TWA	3 mg/m³ (respirable fraction; particulate matter containing no asbestos and < 1% crystalline silica)
		USA: NIOSH: TWA USA: NIOSH: TWA USA: OSHA: TWA USA: OSHA: TWA	10 mg/m³ inhalable fraction 5 mg/m³ (respirable fraction) 15 mg/m³ inhalable fraction 5 mg/m³ (respirable fraction)

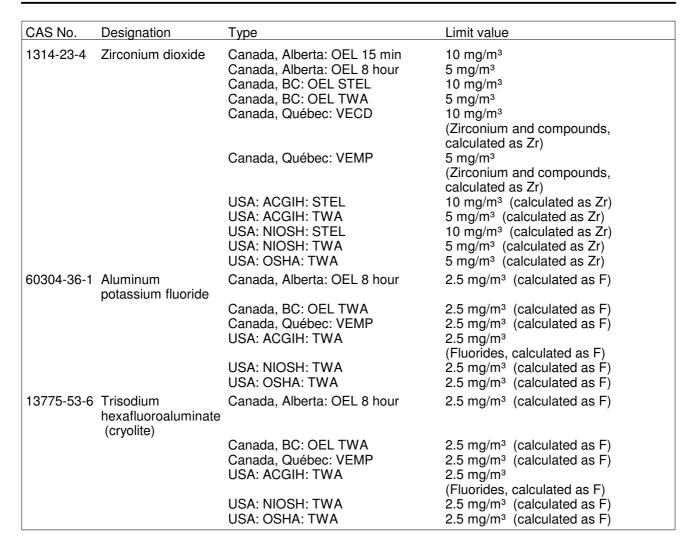
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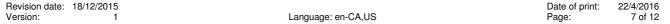
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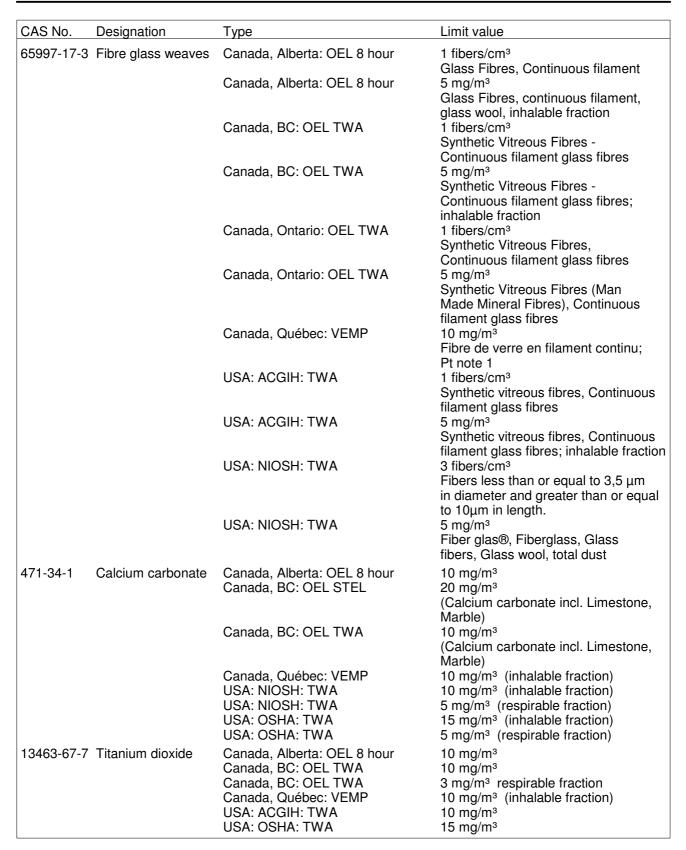


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CAS No.	Designation	Туре	Limit value
1309-37-1	Diiron trioxide	Canada, Alberta: OEL 8 hour Canada, BC: OEL STEL Canada, BC: OEL TWA Canada, BC: OEL TWA	5 mg/m³ (respirable fraction) 10 mg/m³ Smoke; calculated as Fe 10 mg/m³ (oxide, red) 3 mg/m³
		Canada, BC: OEL TWA Canada, BC: OEL TWA Canada, Québec: VEMP Canada, Québec: VEMP USA: ACGIH: TWA USA: OSHA: TWA	(oxide, red) respirable fraction 5 mg/m³ (oxide dust) 5 mg/m³ Smoke; calculated as Fe 10 mg/m³ (red) 5 mg/m³ 5 mg/m³ (respirable fraction) 10 mg/m³ (Iron oxide, fume; calculated as Fe)
		USA: OSHA: TWA USA: OSHA: TWA	15 mg/m³ (inhalable fraction, red) 5 mg/m³ (red, respirable fraction)
7789-75-5	Calcium fluoride	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Québec: VEMP USA: ACGIH: TWA	2.5 mg/m³ (calculated as F) 2.5 mg/m³ (calculated as F) 2.5 mg/m³ (calculated as F) 2.5 mg/m³ (Fluorides, calculated as F)
		USA: NIOSH: TWA USA: OSHA: TWA	2.5 mg/m³ (calculated as F) 2.5 mg/m³ (calculated as F)
7782-42-5	Graphite	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Québec: VEMP USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA USA: OSHA: TWA USA: OSHA: TWA	2 mg/m³ (respirable fraction) 2 mg/m³ (respirable fraction) 2 mg/m³ 2 mg/m³ (respirable fraction) 2.5 mg/m³ (respirable fraction) 15 mg/m³ (inhalable fraction) 15 mppcf 5 mg/m³ (respirable fraction)
1308-38-9	Chromium oxide	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Québec: VEMP USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA	0.5 mg/m ³
7631-86-9	Silicon dioxide	USA: NIOSH: TWA USA: OSHA: TWA USA: OSHA: TWA	6 mg/m³ 20 mppcf 80 mg/m³ total dust
1309-48-4	Magnesium oxide	Canada, Alberta: OEL 8 hour Canada, BC: OEL STEL	10 mg/m³ 10 mg/m³ respirable fraction; Smoke and Dusts
		Canada, BC: OEL TWA Canada, BC: OEL TWA	10 mg/m³ Smoke 3 mg/m³ respirable fraction; Smoke and Dusts
		Canada, Québec: VEMP USA: ACGIH: TWA USA: OSHA: TWA	10 mg/m ³ 10 mg/m ³ (inhalable fraction) 15 mg/m ³
1305-78-8	Calcium oxide	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Québec: VEMP USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA	2 mg/m ³ 5 mg/m ³

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CAS No. Designation	Туре	Limit value
14808-60-7 Quartz (SiO2)	Canada, Alberta: OEL 8 hour Canada, BC: OEL TWA Canada, Ontario: OEL TWA Canada, Québec: VEMP USA: ACGIH: TWA USA: NIOSH: TWA USA: OSHA: TWA	0.025 mg/m³ 0.025 mg/m³ 0.01 mg/m³ (respirable fraction) 0.1 mg/m³ (respirable fraction) 0.025 mg/m³ (respirable fraction) 0.05 mg/m³ (respirable fraction) 10 mg/m³/% SiO2+ 2 (respirable Dust) 250 mppcf/%SiO2+5 fine dust 30 mg/m³/% SiO2+ 2 inhalable fraction

Engineering controls

Provide good ventilation and/or an exhaust system in the work area.

Technical measures and the application of suitable work processes have priority over

personal protection equipment.

In case of development of vapors or dust: The use of local exhaust ventilation is

recommended.

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.

In case of dust formation or formation of aerosol: Respiratory protection:

> 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:

Odor:

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

Form: solid Appearance:

Color: varying colors

No data available Odor threshold: No data available pH value: No data available No data available Melting point/freezing point: Initial boiling point and boiling range: No data available No data available Flash point/flash point range: No data available Evaporation rate: Flammability: No data available Explosion limits: No data available Vapor pressure: No data available

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Vapor density:

Density:

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

Incompatible materials: Oxidizing agents, acids.

Hazardous decomposition products:

At temperatures above 482 °F (250 °C) hazardous decomposition products may be

generated.

Thermal decomposition: No data available

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.

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Other information: Information about Aluminum potassium fluoride:

LD50, Rat, oral: >2000 mg/kg LC50, Rat, inhalative: > 3.4 mg/L/h LD50, Rabbit, dermal: >2000 mg/kg

Information about Trisodium hexafluoroaluminate (cryolite):

LD50, Rat, oral: >5000 mg/kg LC50, Rat, inhalative: 4.47 mg/L/4h LD50, Rabbit, dermal: >2100 mg/kg

Symptoms

In case of inhalation: Inhalation of dust may cause irritation of the respiratory system.

Irritation of nose, throat, lung

In case of ingestion: Can damage your health.

After contact with skin: Can be irritating because of mechanical abrasion.

12. Ecological information

Ecotoxicity

Aquatic toxicity: Information about Trisodium hexafluoroaluminate (cryolite):

Algae toxicity:

EC50 Pseudokirchneriella subcapitata (green algae): 8.8 mg/L/72h (OECD 201)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 156 mg/L/48h (OECD 202)

Fish toxicity:

LC50 Brachydanio rerio (zebra-fish): 99 mg/L/96h (OECD 203)

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

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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

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

16. Other information

Hazard rating systems:

1 0

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

Date of first version: 18/12/2015

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.

