

SAFETY DATA SHEET

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



Alumaster (HSD-R, HSD-F) + Edge Finish

Product number 198

Revision date: Mar/10/2020
Version: 3

Language: en-US,CA

Date of print: Mar/18/2020
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1. Product and company identification

Product identifier

Trade name: Alumaster (HSD-R, HSD-F) + Edge Finish
Trade name: Alumaster (HSD-r, HSD-F) + Edge Finish

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

General use: Tool for machining of different materials, in particular aluminium.
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: 1-800-342-9015
Telefax: 262-255-2840
Department 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
Department responsible for information: 1-866-245-1555

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: silver-metallic inserts in blue GRP discs

Odor: odorless

Classification: Acute Toxicity - oral - Category 4; Acute Toxicity - inhalative - Category 2; Eye Irritation - Category 2A; Respiratory Sensitizer - Category 1; Sensitization - skin - Category 1; Carcinogenicity - Category 1B; Reproductive toxicant - Category 2; Aquatic toxicity - acute - Category 1 (M-factor = 10); Aquatic toxicity - chronic - Category 2;

Hazard symbols:



Signal word:

Danger

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Hazard statements:

- Harmful if swallowed.
- May cause an allergic skin reaction.
- Causes serious eye irritation.
- Fatal if inhaled.
- May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- May cause cancer.
- Suspected of damaging fertility.
- Very toxic to aquatic life.
- Toxic to aquatic life with long lasting effects.

Precautionary Statements:

- Obtain special instructions before use.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wash hands and face thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective gloves/protective clothing/eye protection/face protection.
- In case of inadequate ventilation wear respiratory protection.
- IF ON SKIN: Wash with plenty of water/soap.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF exposed or concerned: Get medical advice/attention.
- Immediately call a POISON CENTER/doctor.
- Specific treatment is urgent (see ' First aid ' on this label).
- Rinse mouth.
- If skin irritation or rash occurs: Get medical advice/attention.
- If eye irritation persists: Get medical advice/attention.
- If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- Wash contaminated clothing before reuse.
- Collect spillage.
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.
- Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is 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. Comply with occupational limit values for dust.

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: The components listed below represent the chemical composition of the Tungsten Carbide cutting inserts.

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Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 12070-12-1	Tungsten carbide	89.5 %	not classified
CAS 7440-48-4	Cobalt	10 %	Acute Toxicity - oral - Category 4. Acute Toxicity - inhalative - Category 1. Eye Irritation - Category 2A. Respiratory Sensitizer - Category 1. Sensitization - skin - Category 1. Carcinogenicity - Category 1B. Reproductive toxicant - Category 2. Aquatic toxicity - acute - Category 1 (M-factor = 10). Aquatic toxicity - chronic - Category 1 (M-factor = 1).

Additional information: The carbide cutting elements are available with or without coating.

4. First aid measures

- In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult physician immediately.
- Following skin contact: Remove residues with soap and water. Change contaminated clothing. In case of skin reactions, consult a physician.
- After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.
- After swallowing: Rinse mouth. Never give anything by mouth to an unconscious person. Seek medical attention.

Most important symptoms/effects, acute and delayed

Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye irritation.

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.

In case of fire may be liberated: Metallic oxides, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

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

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6. Accidental release measures

- Personal precautions:** Avoid exposure - obtain special instructions before use. Avoid generation of dust. Do not breathe dust.
Provide adequate ventilation. Wear appropriate protective equipment. Take off contaminated clothing.
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:** Obtain special instructions before use.
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. Work place should be equipped with a shower and an eye rinsing apparatus.
Avoid contact during pregnancy/while nursing.

Storage

- Requirements for storerooms and containers:** Store container tightly closed in a dry area.
Protect from moisture contamination.
- Hints on joint storage:** Keep away from acids and alkalis.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7440-48-4	Cobalt	Canada, Alberta: OEL 8 hour	0.02 mg/m ³
		Canada, BC: OEL TWA	0.02 mg/m ³
		Canada, Québec: VEMP	0.02 mg/m ³
		USA: ACGIH: TWA	0.02 mg/m ³ (inhalable fraction)
		USA: NIOSH: TWA	0.05 mg/m ³
		USA: OSHA: TWA	0.1 mg/m ³

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
7440-48-4	Cobalt	USA: ACGIH-BEI, urine	15 µg/L	Cobalt; not combined with Tungsten Carbide	end of shift at end of workweek

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Engineering controls

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: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
- Skin protection: Wear suitable protective clothing and shoes.
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- 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/vapor/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General hygiene considerations:

Obtain special instructions before use. Avoid contact during pregnancy/while nursing.
Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
Take off immediately all contaminated clothing and wash it before reuse.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
When handling large quantities, supply emergency spray.

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: silver-metallic inserts in blue GRP discs
Odor:	odorless
Odor threshold:	No data available
pH value:	Not applicable
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

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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: Keep away from heat. Protect from moisture contamination.

Incompatible materials: Acids and alkalis.

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): Acute Toxicity - oral -
Category 4 = Harmful if swallowed. ATEmix (calculated): $300 < ATE < 2000$ mg/kg.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATEmix (calculated): $ATE > 2000$ mg/kg.

Acute toxicity (inhalative): Acute Toxicity - inhalative -
Category 2 = Fatal if inhaled. ATEmix (calculated): $0,05 < ATE < 0,5$ mg/L.

Skin corrosion/irritation: Lack of data.

Serious eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.

Sensitisation to the respiratory tract: Respiratory Sensitizer -
Category 1 = May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation: Sensitization - skin - Category 1 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Carcinogenicity - Category 1B = May cause cancer.

Reproductive toxicity: Reproductive toxicant - Category 2 = Suspected of damaging fertility.

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: Chronic toxicity carcinogenic effect:
Information about Cobalt:
IARC Rating: Group 2B
OSHA Carcinogen: not listed
NTP Rating: not listed
Information about tungsten carbide:
LD50, Rat, oral: > 2000 mg/kg
LC50, Rat, inhalative (dusts/mist): > 5,3 mg/L/4h
Information about Cobalt:
LD50, Rat, oral: 550 mg/kg
LC50, Rat, inhalative (dusts/mist): < 0.05 mg/L/4h
LD50, Rat, dermal: > 2000 mg/kg

12. Ecological information

Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.
Information about Cobalt:
Algae toxicity:
EC50 Selenastrum capricornutum: 0.035 mg/L/72 h
Bacterial toxicity:
EC50 activated sludge: > 50 mg/L/3 h
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): >100 mg/L/48 h
Fish toxicity:
LC50 Brachydanio rerio (zebra-fish): > 100 mg/L/96 h
Information about tungsten carbide:
Algae toxicity:
EC50 Selenastrum capricornutum: 80 mg/L/72 h
Bacterial toxicity:
EC20 activated sludge: > 1000 mg/L/3 h
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): >1000 mg/L/48 h
Fish toxicity:
LC50 Brachydanio rerio (zebra-fish): > 1000 mg/L/96 h

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.

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13. Disposal considerations

Product

Recommendation: Dispose of waste according to applicable legislation.
Refer to manufacturer/supplier for information on recovery/recycling.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.

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: not applicable

Air transport (IATA)

Proper shipping name: Not restricted

Further information

No dangerous good in sense of these transport regulations.

15. Regulatory information

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.

Cobalt: Carcinogen Status:
IARC Rating: Group 2B
OSHA Carcinogen: not listed
NTP Rating: not listed
Other Environmental Laws:
RCRA Groundwater Monitoring: Methods 6010, 7200, 720 / PQL 70, 500, 10
SARA Title III Section 313, Toxic Release: Conc. 0.1% / Threshold Standard
NIOSH Recommendations:
Occupational Health Guideline: 0146

National regulations - U.S. State Regulations

Cobalt: California Proposition 65: cancer

National regulations - Canada

No data available

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16. Other information

Hazard rating systems:



NFPA Hazard Rating:

Health: 3 (Serious)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 3 (Serious) - Chronic effects

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	*	3
FLAMMABILITY		0
PHYSICAL HAZARD		0
		X

Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL: Occupational Exposure Limit Value

AS/NZS: Australian Standards/New Zealand Standards

CAS: Chemical Abstracts Service

CFR: Code of Federal Regulations

CLP: Classification, Labelling and Packaging

DMEL: Derived minimal effect level

DNEL: Derived no-effect level

EC50: Effective Concentration 50%

EC: European Community

EN: European Standard

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IMDG Code: International Maritime Dangerous Goods Code

LC50: Median lethal concentration

LD50: Lethal dose 50%

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

M-factor: Multiplication factor

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic

PNEC: Predicted no-effect concentration

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

TLV: Threshold Limit Value

TSCA: Toxic Substance Control Act

vPvB: Very persistent and very bioaccumulative

WEL: Workplace Exposure Limit

WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 1: Changes of product list
Changes in section 3: Composition / Information on ingredients

Date of first version: May/8/2017

Department issuing data sheet

Contact person: see section 1: Department responsible for information

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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.