1. Product and company identification

Product identifier

Trade name: Universal Cleaner UC-S 500
This safety data sheet pertains to the following product:
42200060 - 48747 UNIV. CLEANER UC-S 500 17 fl oz

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

General use: Detergent/Cleaning agent.
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: liquid
Color: colorless

Odor: characteristic

Classification: This material is classified as not hazardous.

Additional information The test L.2 for self-sustained combustion in accordance with UN, Part III section 32 is negative.

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

Special danger of slipping by leaking/spilling product.
see section 11: Toxicological information

3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 64-17-5	Ethanol 99.9 DRAA	5 - 10 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A.
CAS 111-76-2	2-Butoxyethanol	< 5 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Acute Toxicity - inhalative - Category 4. Skin Irritation - Category 2. Eye Irritation - Category 2A.

4. First aid measures

In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Put victim at rest and keep warm. Seek medical attention.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water. 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. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.
Immediately get medical attention.

Most important symptoms/effects, acute and delayed

In case of inhalation: irritation to respiratory tract, Cough, shortage of breath
In case of ingestion:
gastrointestinal complaints, Headache, drowsiness, dizziness, inebriation, Nausea and vomiting.
After contact with skin:
Prolonged/repetitive skin contact may cause skin defattening or dermatitis.
May cause irritations.
After eye contact: May cause irritations.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:
approx. 100.4 °F (38 °C)

Auto-ignition temperature: No data available

Suitable extinguishing media:
Water spray jet, Foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:
Full water jet

Specific hazards arising from the chemical

May form dangerous gases and vapors in case of fire.
In case of fire may be liberated: nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Cool exposed containers with water spray.
Heating causes rise in pressure with risk of bursting.

6. Accidental release measures

Personal precautions: Avoid contact with the substance. Wear appropriate protective equipment.
Do not breathe vapors. Provide adequate ventilation. Keep unprotected people away.

Environmental precautions:
Do not allow to enter into ground-water, surface water or drains.

Methods for clean-up: Clear spills immediately. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal. Wash spill area with plenty of water.
Special danger of slipping by leaking/spilling product.

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed.
Do not breathe vapors. Avoid contact with skin and eyes.
Wear appropriate protective equipment. Take off immediately all contaminated clothing.
When using do not eat, drink or smoke.

Storage

Requirements for storerooms and containers:
Keep container tightly closed.
Keep only in original container.
Protect from frost.

Hints on joint storage: Do not store together with food.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
64-17-5	Ethanol 99.9 DRAA	Canada, Alberta: OEL 8 hour	1880 mg/m³; 1000 ppm
		Canada, BC: OEL STEL	1000 ppm
		Canada, Québec: VEMP	1880 mg/m³; 1000 ppm
		USA: ACGIH: STEL	1000 ppm
		USA: NIOSH: TWA	1900 mg/m³; 1000 ppm
		USA: OSHA: TWA	1900 mg/m³; 1000 ppm
111-76-2	2-Butoxyethanol	Canada, Alberta: OEL 8 hour	97 mg/m³; 20 ppm
		Canada, BC: OEL TWA	20 ppm
		Canada, Québec: VEMP	97 mg/m³; 20 ppm
		USA: ACGIH: TWA	97 mg/m³; 20 ppm
		USA: NIOSH: TWA	24 mg/m³; 5 ppm (may be absorbed through the skin)
		USA: OSHA: TWA	240 mg/m³; 50 ppm (may be absorbed through the skin)

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
111-76-2	2-Butoxyethanol	USA: ACGIH-BEI, urine	200 mg/g creatinine	Butoxyacetic acid (BAA)	end of exposure or end of shift

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.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Nitrile rubber
Layer thickness: >0,4 mm.
Breakthrough time: >480 min.
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. Use combination filter type A according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

General hygiene considerations:

Do not breathe vapors. Avoid contact with skin and eyes.
Take off immediately all contaminated clothing.
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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Physical state at 68 °F (20 °C) and 101.3 kPa: liquid Color: colorless
Odor:	characteristic
Odor threshold:	No data available
pH value:	11.4
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	194 °F (90 °C) (1013 hPa)
Flash point/flash point range:	approx. 100.4 °F (38 °C)
Evaporation rate:	No data available
Flammability:	The test L.2 for self-sustained combustion in accordance with UN, Part III section 32 is negative.
Explosion limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 68 °F (20 °C): approx. 0.99 g/mL
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Viscosity, kinematic:	at 68 °F (20 °C): 19 s (DIN 4mm)

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: Protect from frost.

Incompatible materials: No data available

Hazardous decomposition products:
No known hazardous decomposition products.

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

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

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 20 mg/L

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: Information about Ethanol:
LD50, Rat, oral: 10470 mg/kg (OECD 401)
LD50, Rabbit, dermal: 20000 mg/kg
LD50, Rat, inhalative: 116,9-133,8 mg/L/4h (OECD 403)

Information about 2-Butoxyethanol:
LD50, Rat, oral: 1250-1490 mg/kg (OECD 401)
LD50, Rabbit, dermal: 841 mg/kg (OECD 402)
LC50, Rat, inhalative: 2-20 mg/L/4h Chronic toxicity carcinogenic effect:
Information about 2-Butoxyethanol:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed

Symptoms

In case of inhalation: irritation to respiratory tract, Cough, shortage of breath
In case of ingestion:
gastrointestinal complaints, Headache, drowsiness, dizziness, inebriation, Nausea and vomiting.
After contact with skin:
Prolonged/repetitive skin contact may cause skin defattening or dermatitis.
May cause irritations.
After eye contact: May cause irritations.

12. Ecological information

Ecotoxicity

Aquatic toxicity:

Information about Ethanol:
Algae toxicity:
EC50 Chlorella vulgaris: 675 mg/L/4d (OECD 201)
Bacterial toxicity:
EC50 Pseudomonas putida: 5,8 g/L/4h
Acute Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 5012 mg/L/48 h
Chronic daphnia toxicity:
LC50 Daphnia magna (Big water flea): 1806 mg/L/10 d
NOEC Daphnia magna (Big water flea): 2-9,6 mg/L/10 d.
Acute fish toxicity:
LC50 Pimephales promelas (fathead minnow): 14,2 g/L/96 h.
Chronic (long-term) fish toxicity:
LC50 fish: 9164-14536 mg/L/200 h

Information about 2-Butoxyethanol:
Algae toxicity:
EC50: 1840 mg/L/72h (OECD 201)
Chronic algae toxicity:
NOEC algae: 286 mg/L/72 d (OECD 201) (OECD 211).
Acute Daphnia toxicity:
LC50 Daphnia magna (Big water flea): 1815 mg/L/24h (DIN 38412).
Chronic daphnia toxicity:
LC50 Daphnia magna (Big water flea): 297 mg/L/21 d (OECD 211).
NOEC Daphnia magna (Big water flea): 100 mg/L/21 d (OECD 211).
Acute fish toxicity:
LC50 Oncorhynchus mykiss: 1474 mg/L/96h (OECD 203).
Chronic (long-term) fish toxicity:
NOEC Danio rerio (zebrafish): >100 mg/L/21 h (OECD 204).

Further details: The surfactants contained in this mixture comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

Mobility in soil

No data available

Persistence and degradability

Further details:

Biodegradability
Information about Ethanol: approx. 84 %/20 d (Easily bio-degradable)
Information about 2-Butoxyethanol: 88 %/20 d.

Additional ecological information

Volatile organic compounds (VOC):

11 % by weight = 108.9 g/L

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.

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.
The test L.2 for self-sustained combustion in accordance with UN, Part III section 32 is negative.

15. Regulatory information

National regulations - U.S. Federal Regulations

Ethanol 99.9 DRAA:
TSCA Inventory: listed
TSCA HPVC: not listed
NIOSH Recommendations:
Occupational Health Guideline: 0262

2-Butoxyethanol:
TSCA Inventory: listed
TSCA HPVC: not listed
Carcinogen Status:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed
Clean Air Act:
SOCMI Chemical: yes
NIOSH Recommendations:
Occupational Health Guideline: 0070*

National regulations - U.S. State Regulations

2-Butoxyethanol: California Proposition 65 code: not listed
Idaho Air Pollutant List:
Title 585: AAC: 6 - EL: 8 - OEL: 120 - Title 586: --
Massachusetts Haz. Substance codes: 2,4,6 F8
Minnesota Haz. Substance:
Codes: AO - Ratings: 9.19 - Status: --
Pennsylvania Haz. Substance code: --
Washington Air Contaminant:
TWA: 25 ppm - 120 mg
Skin: Protective measures should be taken to prevent or reduce skin absorption.

National regulations - Canada

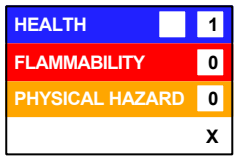
No data available

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



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
NOEC: No Observed Effect Concentration
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
UN: United Nations
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit
WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 3: classification Component
Date of first version: Oct/18/2016

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.