

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : Prolystica® Ultra Concentrate Alkaline Detergent
Product code : 1C12

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

Use of the substance/mixture : For professional use only
Use of the substance/mixture : Alkaline Detergent

1.3. Details of the supplier of the safety data sheet

STERIS Corporation
P. O. Box 147, St. Louis, MO 63166, US
Telephone Number for Information: 1-800-548-4873 (Customer Service-Healthcare Products)

1.4. Emergency telephone number

Emergency number : US Emergency Telephone No.1-314-535-1395 (STERIS); 1-800-424-9300 (CHEMTREC)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corr. 1B H314
Eye Dam. 1 H318

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P260 - Do not breathe fume, mist, spray, vapours
P264 - Wash hands thoroughly after handling
P280 - Wear protective gloves, protective clothing, face and eye protection
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor, a POISON CENTER
P321 - Specific treatment (see on this label)
P363 - Wash contaminated clothing before reuse
P405 - Store locked up

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Sodium hydroxide	(CAS No) 1310-73-2	7 - 13	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318
Hexyl D-glucoside	(CAS No) 54549-24-5	1 - 5	Eye Dam. 1, H318
Potassium hydroxide	(CAS No) 1310-58-3	1 - 5	Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Seek medical attention immediately.
- First-aid measures after skin contact : Immediately flush skin with plenty of water for at least 15 minutes. Seek medical attention immediately.
- First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention immediately.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Give water to drink if victim completely conscious/alert. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes severe skin burns and eye damage.
- Symptoms/injuries after inhalation : In fine dispersion/spraying/misting: Irritation of the respiratory tract and the other mucous membranes.
- Symptoms/injuries after skin contact : Caustic burns/corrosion of the skin.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- Symptoms/injuries after ingestion : Severe irritation or burns to the mouth, throat, oesophagus, and stomach.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Water fog. Foam, carbon dioxide, dry chemical.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.
- Other information : Contact with metallic substances may release flammable hydrogen gas.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Stop leak if safe to do so. Avoid contact with skin, eyes and clothing. Avoid breathing dust, mist or spray. Spilled material may present a slipping hazard. Ensure adequate air ventilation. Work in a well-ventilated area.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.

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Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Ensure waste is collected and contained. Neutralise spill carefully with any weak acid and flush remainder with plenty of water. Collect all waste in suitable and labelled containers and dispose according to local legislation. Wash contaminated areas with large quantities of water to a sanitary sewer, if in accordance with local, state or national legislation. Do not allow to enter into surface water or drains. Ensure all national/local regulations are observed.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Product for industrial use only. Read label before use. Avoid all eye and skin contact and do not breathe vapour and mist. Provide good ventilation in process area to prevent formation of vapour. For further information refer to section 8 : Exposure-controls/personal protection.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Separate working clothes from town clothes. Launder separately. Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : A washing facility/water for eye and skin cleaning purposes should be present. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits.

Storage conditions : Keep out of reach of children. Keep only in original container. Keep container closed when not in use. Store in a dry, cool and well-ventilated place.

Incompatible materials : Acids, soft metals, oxidizers, organic halogen compounds. Contact with some metals such as magnesium, aluminum, zinc (galvanized), tin, chromium, brass and bronze may generate hydrogen. Reacts violently with acids liberating irritating gas. May evolve flammable hydrogen gas on contact with soft metals.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium hydroxide (1310-58-3)

USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
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Sodium hydroxide (1310-73-2)

USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
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USA OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
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8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation.

Personal protective equipment : Gloves. Protective goggles. Protective clothing. For certain operations, additional Personal Protection Equipment (PPE) may be required.



Hand protection : Use neoprene or rubber gloves. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Eye protection : Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection : Wear suitable protective clothing. Rubber apron, boots.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Other information : Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear to hazy.
Colour	: Golden yellow to amber.
odour	: No data available
Odour threshold	: No data available
pH	: > 13 (concentrate)
pH solution	: 11.9 - 12.2 (1% Solution)
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.31 - 1.34 Specific Gravity
Solubility	: Water: completely soluble
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Acids, soft metals, oxidizers, organic halogen compounds. Contact with some metals such as magnesium, aluminum, zinc (galvanized), tin, chromium, brass and bronze may generate hydrogen. Reacts violently with acids liberating irritating gas. May evolve flammable hydrogen gas on contact with soft metals.

10.6. Hazardous decomposition products

Thermal decomposition generates : Fume. Carbon monoxide. Carbon dioxide. Phosphorus oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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LD50 oral rat	3129 mg/kg

Potassium hydroxide (1310-58-3)	
LD50 oral rat	214 mg/kg
ATE CLP (oral)	500.000 mg/kg bodyweight

Sodium hydroxide (1310-73-2)	
LD50 dermal rabbit	1350 mg/kg
ATE CLP (dermal)	1350.000 mg/kg bodyweight

Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: > 13 (concentrate)
Serious eye damage/irritation	: Causes serious eye damage. pH: > 13 (concentrate)
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met.
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met.
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met.
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met.
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met.
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met.
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met.
Potential Adverse human health effects and symptoms	: Not classified Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: In fine dispersion/spraying/misting: Irritation of the respiratory tract and the other mucous membranes.
Symptoms/injuries after skin contact	: Caustic burns/corrosion of the skin.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Severe irritation or burns to the mouth, throat, oesophagus, and stomach.

SECTION 12: Ecological information

12.1. Toxicity

Sodium hydroxide (1310-73-2)	
LC50 fishes 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

12.2. Persistence and degradability

Prolystica® Ultra Concentrate Alkaline Detergent	
Persistence and degradability	The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3. Bioaccumulative potential

Prolystica® Ultra Concentrate Alkaline Detergent	
Bioaccumulative potential	Not established.

Potassium hydroxide (1310-58-3)	
Log Pow	0.65

12.4. Mobility in soil

No additional information available

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Product may be flushed to a sanitary sewer with copious amounts of water, if in accordance with local, state or national legislation. Dispose in a safe manner in accordance with local/national regulations. Do not allow to enter into surface water or drains. Ensure all national/local regulations are observed. Hazardous waste (corrosive) based on pH.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1824 Sodium hydroxide solution, 8, III

UN-No.(DOT) : 1824

DOT NA no. : UN1824

DOT Proper Shipping Name : Sodium hydroxide solution

Department of Transportation (DOT) Hazard Classes : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : III - Minor Danger

Additional information

Other information : No supplementary information available.

Special transport precautions : NOT approved for air shipment.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

ICAO/IATA Class: Product containers are vented; therefore, this product cannot be shipped by air

SECTION 15: Regulatory information

15.1. US Federal regulations

Prolystica® Ultra Concentrate Alkaline Detergent

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	15384 lb
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Potassium hydroxide (1310-58-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	1000 lb
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Sodium hydroxide (1310-73-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

RQ (Reportable quantity, section 304 of EPA's List of Lists) :	1000 lb
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Hexyl D-glucoside (54549-24-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

Not applicable

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15.3. US State regulations

This product contains a chemical known to the State of California to cause cancer.

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
H301	Toxic if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

NFPA health hazard

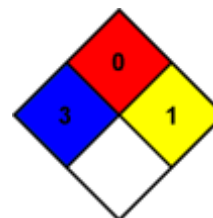
: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard

: 0 - Materials that will not burn.

NFPA reactivity

: 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



SDS US (GHS HazCom 2012)

The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed.