

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

1.1. Product identifier

Product form : Mixture
 Trade name : Prolystica® 2X Concentrate Alkaline Detergent
 Product code : 1C34

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For hospital and professional use only. Not for home use.
 Use of the substance/mixture : Alkaline Detergent

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer:

STERIS Corporation
 P. O. Box 147, St. Louis, MO 63166, US
 Telephone Number for Information: 1-800-548-4873 (Customer Service – Healthcare Products)
 US Emergency Telephone No.1-314-535-1395 (STERIS); 1-800-424-9300 (CHEMTREC)

Supplier:

STERIS Ireland Limited
 IDA Business and Technology Park
 Tullamore
 County Offaly
 R35 X865
 Ireland.
 Product/Technical Information Phone No: +44 (0) 116 276 8636
 Email: asksteris_msds@steris.com

1.4. Emergency telephone number

Emergency number : +44 (0) 1895 622 639

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Corr. 1A H314

Eye Dam. 1 H318

Full text of H-phrases: see Section 16.

Adverse physicochemical, human health and environmental effects

No additional information available.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H314 - Causes severe skin burns and eye damage.
 H318 - Causes serious eye damage.

Precautionary statements (CLP) :

P260 - Do not breathe spray, mist, vapours.
 P280 - Wear protective clothing, protective gloves, 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.
 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.
 P363 - Wash contaminated clothing before reuse.

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according to Regulation (EC) No. 453/2010

2.3. Other hazards

No additional information available.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium hydroxide	(CAS No) 1310-73-2 (EC no) 215-185-5 (EC index no) 011-002-00-6	1 - 3	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318
Sodium octyl sulfate	(CAS No) 142-31-4 (EC no) 205-535-5	1 - 2	Skin Irrit. 2, H315 Eye Dam. 1, H318
1-Octanamine, N,N-dimethyl-, N-oxide	(CAS No) 2605-78-9 (EC no) 607-854-9	1 - 2	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
1,2,4-Butanetricarboxylic acid, 2-phosphono-	(CAS No) 37971-36-1 (EC no) 253-733-5	0.5 – 1.5	Met. Corr. 1, H290 Eye Irrit. 2, H319
Methyl-oxirane polymer with oxirane	(CAS No) 9003-11-6 (EC no) 618-355-0	0.5 – 1.5	Not classified

Full text of H-phrases: see Section 16.

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 patient to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. If not breathing, give artificial respiration. Seek medical attention immediately.
First-aid measures after skin contact	: Remove immediately all contaminated clothing. Immediately flush skin with plenty of water for at least 15 minutes. Obtain medical attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Immediately flush eyes thoroughly with water for at least 15 minutes. 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	: Fine dispersion/spraying/misting: Irritation of the respiratory tract and the other mucous membranes.
Symptoms/injuries after skin contact	: Causes chemical burns.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Corrosive to mouth, throat 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 primary source of fire. Foam. Dry powder. Carbon dioxide. Water spray.
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5.2. Special hazards arising from the substance or mixture

Fire hazard	: May react with soft metals to evolve flammable hydrogen gas.
Hazardous decomposition products in case of fire	: Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. 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.

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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 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.

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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Neutralise slowly product with a weak acid. Store away from other materials. Wash contaminated areas with large quantities of water to a sanitary sewer, if in accordance with local, state or national legislation.

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. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wear protective clothing. 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 : Comply with applicable regulations.

Storage conditions : 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

Sodium hydroxide (1310-73-2)		
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³
USA - ACGIH	ACGIH (ceiling) (mg/m ³)	2 mg/m ³
USA - IDLH	US IDLH (mg/m ³)	10 mg/m ³
USA - NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³

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 adequate ventilation.

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Personal protective equipment

: Avoid all unnecessary exposure. Personal protective equipment should be selected based upon the conditions under which this product is handled or used. Protective clothing. Gloves. Protective goggles.



Hand protection

: Wear rubber gloves.

Eye protection

: Wear chemical splash goggles or safety goggles.

Skin and body protection

: Wear suitable protective clothing. Rubber apron and rubber boots.

Respiratory protection

: In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask.

Other information

: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Light yellow to peach
Odour	: Slight chemical odour
Odour threshold	: No data available
pH	: 12.7 Approximately
pH solution	: 11.2 Approximately (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)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.117 g/ml Specific Gravity
Solubility	: Water: Completely soluble
Log Pow	: 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.

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10.6. Hazardous decomposition products

Thermal decomposition generates: Corrosive vapours. Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Corrosive to eyes and skin.

1,2,4-Butanetricarboxylic acid, 2-phosphono- (37971-36-1)	
LD50 oral rat	> 4000 mg/kg
LD50 dermal rat	> 4000 mg/kg
LC50 inhalation rat (mg/l)	> 1979 mg/m ³ (Exposure time: 4 h)

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 damage pH: 12.7 Approximately
Serious eye damage/irritation	: Causes serious eye damage pH: 12.7 Approximately
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.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : 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.

1,2,4-Butanetricarboxylic acid, 2-phosphono- (37971-36-1)	
EC50 other aquatic organisms 1	140 mg/l (Exposure time: 72 h - Species: Desmodemus subspicatus)

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® 2X Concentrate Alkaline Detergent	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Prolystica® 2X Concentrate Alkaline Detergent	
Bioaccumulative potential	Not established.

1,2,4-Butanetricarboxylic acid, 2-phosphono- (37971-36-1)	
BCF fish 1	(No bioaccumulation expected)

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available.

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12.6. Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. : 1824
UN-No.(IATA) : 1824
UN-No. (IMDG) : 1824
UN-No.(ADN) : 1824

14.2. UN proper shipping name

Proper Shipping Name : SODIUM HYDROXIDE SOLUTION
Transport document description : UN 1824, SODIUM HYDROXIDE SOLUTION, 8, CORROSIVE, PG III

14.3. Transport hazard class(es)

Class (UN) : 8
Classification code (UN) : C5
Class (IATA) : 8
Class (IMDG) : 8
Class (ADN) : 8
Hazard labels (UN) : 8



14.4. Packing group

Packing group (UN) : III

14.5. Environmental hazards

Dangerous for the environment : No.
Marine pollutant : No.
Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Only 5 Gallon and 20 Liter pails are approved for air shipment.

14.6.1. Overland transport

Hazard identification number (Kemler No.) : 80
Classification code (UN) : C5
Orange plates :



Transport category (ADR) : 3
Tunnel restriction code : E
Limited quantities (ADR) : 5L
Excepted quantities (ADR) : E1
EAC code : 2R

14.6.2. Transport by sea

IMDG Class : UN 1824, SODIUM HYDROXIDE SOLUTION, 8, CORROSIVE, PG III

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14.6.3. Air transport

ICAO/IATA Class: : UN 1824, SODIUM HYDROXIDE SOLUTION, 8, CORROSIVE, PG III

Only 5 Gallon and 20 Liter pails are approved for air shipment.

14.6.4. Inland waterway transport

No additional information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH candidate substance.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date : 10/08/2018

Sources of Key data : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H290	May be corrosive to metals
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation

SDS EU (REACH Annex II)

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.