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

1.1. Product identifier
Product form : Mixture
Trade name : Prolystica HP Enzymatic Automated Detergent
Product code : 1C22

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

1.2.1. Relevant identified uses
Industrial/Professional use spec : Product for industrial use only
Use of the substance/mixture : Enzymatic Cleaner

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 Irrit. 2 H315
Eye Dam. 2a H319
Resp. Sens. 1 H334
STOT SE 2 H335

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) :

Signal word (CLP) : Danger
Hazard statements (CLP) : H315 -Causes skin irritation.
H319 – Causes serious eye irritation.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
This may occur with prolonged or frequent exposure to dried dusts or aerosol foam of the concentrated product.
H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P261 - Avoid breathing mist, spray, vapours.
P264 - Wash hands thoroughly after handling.
P571 – Use only in well-ventilated area.
P280 - Wear eye protection, protective clothing, protective gloves
Section 1: Identification

**Prolystica® HP Enzymatic Automated Detergent**

Safety Data Sheet according to Regulation (EC) No. 453/2010

P284 – In case of inadequate ventilation; Wear respiratory protection.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P332+P313 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 – If eye irritation persists: Get medical attention.
P342+P311 – If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P362+P364 – Take off contaminated clothing and wash it before reuse.

Section 2: Hazards Identification

2.3. Other hazards

No additional information available.

Section 3: Composition/information on ingredients

3.1. Substance

Not applicable.

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtilisins (proteolytic enzymes)</td>
<td>(CAS No) 9014-01-1 (EC no) 232-752-2 (EC index no) 647-012-00-8</td>
<td>0.1 – 1.0</td>
<td>Skin Irr. 2, H315 Eye Dam. 1, H318 Resp. Sens. 1, H334 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of EUH-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. If not breathing, give artificial respiration. Get medical attention.

First-aid measures after skin contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention.

First-aid measures after eye contact: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately get medical attention.

First-aid measures after ingestion: If victim completely conscious/alert. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. Give water or milk if the person is fully conscious.

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

Symptoms/injuries after inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction.

Symptoms/injuries after skin contact: Prolonged or repeated contact with the skin may cause dermatitis.

Symptoms/injuries after eye contact: Causes eye irritation.

Symptoms/injuries after ingestion: Can occur: Gastrointestinal disturbance.

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.

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.

Protective equipment for firefighters: Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self-contained breathing apparatus.

Other information: Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, unburned hydrocarbons.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Do not breathe fumes, vapors. Avoid contact with skin, eyes and clothes. Stop leak if safe to do so. Spilled material may present a slipping hazard.

6.1.1. For non-emergency personnel

Protective equipment: Wear protective gloves and eye/face protection. For further information refer to Section 8: "Exposure controls/personal protection".

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: Spills may be picked up with a mop and followed by a water rinse. Small spills may be flushed to a sanitary sewer with copious amounts of water, if in accordance with local, state or national legislation. Residue may be washed down with water. Large spills: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Dispose of contents/container to Comply with applicable local, national and international regulations.

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: Read label before use. Provide good ventilation in process area to prevent formation of vapour. Avoid all eye and skin contact and do not breathe vapour and mist. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Hygiene measures: Take care for general good hygiene and housekeeping. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

Storage conditions: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use. Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Store away from direct sunlight or other heat sources.

Incompatible materials: Strong oxidizing agents.

Storage temperature: < 32 °C ( < 90 °F )

Storage area: Store in dry, cool, well-ventilated area.

Special rules on packaging: Correctly labelled.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Subtilisins (proteolytic enzymes) (9014-01-1) |
|---------------------------------------------|---------------------------------|------------------|
| United Kingdom WEL TWA (mg/m³)             | 0.00004 mg/m³                   |
| United Kingdom WEL STEL (mg/m³)            | 0.00012 mg/m³ (calculated)      |
| USA - ACGIH ACGIH Ceiling (mg/m³)          | 0.00006 mg/m³                   |
| USA – NIOSH NIOSH REL (STEL) (mg/m³)       | 0.00006 mg/m³                   |

8.2. Exposure controls

Appropriate engineering controls: Ensure adequate ventilation. Control airborne concentrations below the exposure limits.

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 or latex-free gloves.
Eye protection: Wear chemical splash googles or safety glasses.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Work in well-ventilated zones or use proper respiratory protection. In fine dispersion/spraying/misting: Wear suitable respiratory equipment.
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: Straw to amber, clear to slightly haze
- Odour: Mild chemical odour
- Odour threshold: No data available
- pH: 6.9 – 7.4
- 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: Approx 1.03 g/ml 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 of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat. Light.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide. Aldehydes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

Based on available data, the classification criteria are not met.

<table>
<thead>
<tr>
<th>Prolytica HP Enzymatic Automated Detergent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>
**Subtilisins (proteolytic enzymes) (9014-01-1)**

<table>
<thead>
<tr>
<th></th>
<th>LD50 oral rat</th>
<th>ATE CLP (oral)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3700 mg/kg</td>
<td>3700.000 mg/kg body weight</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Causes skin irritation

**Serious eye damage/irritation**: Causes eye irritation

**Respiratory or skin sensitisation**: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**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**

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

**Prolytica HP Enzymatic Automated Detergent**

**Persistence and degradability**

The surfactant(s) contained in this preparation complies 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.

**Biodegradability**

Readily biodegradable >60% TCO₂ reduction by day 29, OECD guideline 301B

**Aquatic Toxicity**

96 hr LC50 > 750 mg/l (fathead minnow)

#### 12.3. Bioaccumulative potential

**Prolytica HP Enzymatic Automated Detergent**

**Bioaccumulative potential**

Not established.

#### 12.4. Mobility in soil

No additional information available.

#### 12.5. Results of PBT and vPvB assessment

No additional information available.

#### 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. Do not re-use empty containers.

**Additional information**

Empty containers should be thoroughly rinsed with large quantities of clean water. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation. 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

Not regulated for transport.

#### 14.2. UN proper shipping name

Not applicable.
14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

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

14.6. Special precautions for user
14.6.1. Overland transport
No additional information available.

14.6.2. Transport by sea
No additional information available.

14.6.3. Air transport
No additional information available.

14.6.4. Inland waterway transport
Not subjected to ADN : No additional information available.

14.6.5. Rail transport
Carriage prohibited (RID) : 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 : 03/08/2018

Other information : None.

Full text of EUH-phrases:

- Aquatic Acute 1: Hazardous to the aquatic environment — Acute Hazard, Category 1
- Aquatic Chronic 1: Hazardous to the aquatic environment — Chronic Hazard, Category 1
- Eye Dam. 1: Serious eye damage/eye irritation, Category 1
- Eye Dam. 2A: Serious eye damage/eye irritation, Category 2A
- Resp. Sens. 1: Sensitisation — Respiratory, Category 1
- Skin Irrit. 2: Skin corrosion/irritation Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) Category 3
- H315: Causes skin irritation
- H318: May cause respiratory irritation
- H319: Causes serious eye irritation
- H334: May be harmful if inhaled
- H335: May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H400: Very toxic to aquatic life
- H410: Very toxic to aquatic life with long lasting effects