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
STERIS Corporation
P. O. Box 147, St. Louis, MO 63166, US
Telephone Number for Information: 1-800-548-4872 (Customer Service - Healthcare Products)
US Emergency Telephone No.1-314-535-1395 (STERIS); 1-800-424-9300 (CHEMTREC)

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 Irrit. 2 H315
Eye Dam. 2A H319
Resp. Sens. 1 H334
STOT SE 3 H335
Full text of H-phrases: see Section 16.

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US) :
Signal word (GHS-US) : Danger
Hazard statements (GHS-US) :
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 (GHS-US) :
P261 - Avoid breathing mist, spray, vapours.
P264 - Wash hands thoroughly after handling.
P271 – Use only in well-ventilated area.
P260 - Wear eye protection, protective clothing, protective gloves
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 person 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 skin irritation occurs: Get medical attention.
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.

2.3. Other hazards
No additional information available.
SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable.
Full text of H-phrases: see Section 16.

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtilisins (proteolytic enzymes)</td>
<td>(CAS No) 9014-01-1</td>
<td>0.1 – 1.0</td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1, H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Resp. Sens. 1, H334</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H335</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Subtilisins (proteolytic enzymes) (9014-01-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA - ACGIH ACGIH Ceiling (mg/m³)</td>
</tr>
<tr>
<td>USA - NIOSH NIOSH REL (STEL) (mg/m³)</td>
</tr>
</tbody>
</table>

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 goggles 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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Straw to amber, clear to slightly hazy</td>
</tr>
<tr>
<td>Odour</td>
<td>Mild chemical odour</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6.9 – 7.4</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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.

Prolystica® HP Enzymatic Automated Detergent

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</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>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>3700 mg/kg</td>
</tr>
<tr>
<td>ATE CLP (oral)</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
pH: 7.5-8.5
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

<table>
<thead>
<tr>
<th>Prolystica HP Enzymatic Automated Detergent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability:</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>Biodegradability:</td>
</tr>
<tr>
<td>Readily biodegradable &gt;60% TCO₂ reduction by day 29, OECD guideline 301B</td>
</tr>
<tr>
<td>Aquatic Toxicity:</td>
</tr>
<tr>
<td>96 hr LC₅₀ &gt; 750 mg/l (fathead minnow)</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Prolystica HP Enzymatic Automated Detergent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioaccumulative potential:</td>
</tr>
<tr>
<td>Not established.</td>
</tr>
</tbody>
</table>

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 DOT
No dangerous good in sense of transport regulations.

Additional information

| Other information:                        |
| No supplementary information available.   |

ADR
Transport document description: Non-hazardous.

Transport by sea
IMDG Class: Non-hazardous.

Air transport
ICAO/IATA Class: Non-hazardous.

SECTION 15: Regulatory information

15.1. US Federal regulations

| Subtilisins (proteolytic enzymes) (9014-01-1):|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory. |
15.2. International regulations
No additional information available.

15.3. US State regulations
Not applicable

SECTION 16: Other information
Revision Date : 03/08/2018
Other information : None.

Full text of H-phrases:

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

SDS US (GHS HazCom 2012) - US
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.