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

1.1. Product identifier

Product form : Mixture
Trade name : Prolystica HP Enzymatic Manual Cleaner
Product code : 1C24

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: 1-800-548-4873 (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. 2B H320
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.
H320 - Causes 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.
P280 - 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 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+P335 – 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.

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
</table>
| Subtilisins (proteolytic enzymes)         | (CAS No) 9014-01-1   | 0.1 – 1.0 | Skin Irrit. 2, H315  
Eye Dam. 1, H318  
Resp. Sens. 1, H334  
STOT SE 3, H335  
Aquatic Acute 1, H400  
Aquatic Chronic 1, H410 |
| Alcohols, C12-14-secondary, ethoxylated surfactants | (CAS No) 84133-50-6 | 1 – 5 | Skin Irrit. 2, H315  
Eye Dam. 1, H318 |
| 1-Octanamine, N,N-dimethyl-, N-oxide       | (CAS No) 2605-78-9   | 1 – 3 | Skin Irrit. 2, H315  
Eye Irrit. 2, H319  
STOT SE 3, H335 |

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)

<table>
<thead>
<tr>
<th>Country</th>
<th>Substitution</th>
<th>Limit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>WEL TWA</td>
<td>0.00004 mg/m³</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL STEL</td>
<td>0.00012 mg/m³ (calculated)</td>
</tr>
<tr>
<td>USA - ACGIH</td>
<td>ACGIH Ceiling</td>
<td>0.00006 mg/m³</td>
</tr>
<tr>
<td>USA - NIOSH</td>
<td>NIOSH REL (STEL)</td>
<td>0.00006 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 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, clear to slight haze
Prolystica® HP Enzymatic Manual Cleaner
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Odour**
Mild chemical

**Odour threshold**
No data available

**pH**
7.4 – 8.0

**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 1.05 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

**Explosive limits**
No data available

**Oxidising properties**
No data available

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

**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>Prolystica HP Enzymatic Manual Cleaner</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subtilisins (proteolytic enzymes) (9014-01-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
<tr>
<td>ATE CLP (oral)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Causes skin irritation

Serious eye damage/irritation
Mildly irritating
pH: 7.4 – 8.0

Respiratory or skin sensitisation
May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Prolystica® HP Enzymatic Manual Cleaner
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Specific target toxicity (single exposure)</td>
<td>Not classified</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
<td>Based on available data, the classification criteria are not met</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

12.1.  Toxicity
No additional information available

12.2.  Persistence and degradability

<table>
<thead>
<tr>
<th>Prolystica HP Enzymatic Manual Cleaner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability:</td>
</tr>
<tr>
<td>The surfactant(s) contained in this preparation complies(comply) with the biodegradability</td>
</tr>
<tr>
<td>criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this</td>
</tr>
<tr>
<td>assertion are held at the disposal of the competent authorities of the Member States and will</td>
</tr>
<tr>
<td>be made available to them, at their direct request or at the request of a detergent</td>
</tr>
<tr>
<td>manufacturer.</td>
</tr>
<tr>
<td>Biodegradability: Readily biodegradable &gt;60% TCO₂ reduction by day 29, OECD guideline 301B</td>
</tr>
<tr>
<td>Aquatic Toxicity: 96 hr LC50 &gt; 750 mg/l (fathead minnow)</td>
</tr>
</tbody>
</table>

12.3.  Bioaccumulative potential

<table>
<thead>
<tr>
<th>Prolystica HP Enzymatic Manual Cleaner</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
Prolystica® HP Enzymatic Manual Cleaner
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Description</th>
<th>Inventory Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtilisins (proteolytic enzymes) (9014-01-1)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory.</td>
<td></td>
</tr>
<tr>
<td>Alcohols, C12-14-secondary, ethoxylated (84133-50-6)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory.</td>
<td></td>
</tr>
<tr>
<td>1-Octanamine, N,N-dimethyl-, N-oxide (2605-78-9)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory.</td>
<td></td>
</tr>
</tbody>
</table>

15.2. International regulations
No additional information available.

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

SECTION 16: Other information
Revision Date : 02/27/2018
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. 2B</td>
<td>Serious eye damage/eye irritation, Category 2B</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</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>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes serious eye damage</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>H318</td>
<td>May cause respiratory irritation</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.