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

### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>Revital-Ox Bedside Concentrate™</td>
</tr>
<tr>
<td>Product code</td>
<td>2D86</td>
</tr>
</tbody>
</table>

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

#### 1.2.1. Relevant identified uses

<table>
<thead>
<tr>
<th>Industrial/Professional use spec</th>
<th>Product for industrial use only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of the substance/mixture</td>
<td>Enzymatic Cleaner for Endoscopes and surgical equipment</td>
</tr>
</tbody>
</table>

#### 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_msdss@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]**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irrit. 2</td>
<td>H315</td>
</tr>
<tr>
<td>Eye Dam. 2B</td>
<td>H320</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>H335</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see Section 16.

### 2.2. Label elements

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

#### Hazard pictograms (GHS-US)

[Image of GHS warning symbol]

**Signal word (GHS-US)**: Warning

**Hazard statements (GHS-US)**:

- H315 - Causes skin irritation.
- H320 - Causes eye irritation.
- 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.
- 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+P303 - if skin irritation occurs: Get medical attention. P337+P313 – If eye irritation persists: Get medical attention. 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>
<tbody>
<tr>
<td>Subtilisins (proteolytic enzymes)</td>
<td>(CAS No) 9014-01-1</td>
<td>0.1 – 1.0</td>
<td>Skin Irr. 2, H315</td>
</tr>
<tr>
<td></td>
<td>(EC No) 232-752-2</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>
<tr>
<td>Alcohols, C12-14-secondary, ethoxylated surfactants</td>
<td>(CAS No) 84133-50-6</td>
<td>1 – 5</td>
<td>Skin Irr. 2, H315</td>
</tr>
<tr>
<td></td>
<td>(EC No) 84133-50-6</td>
<td></td>
<td>Eye Dam. 1, H318</td>
</tr>
<tr>
<td>1-Octanamine, N,N-dimethyl-, N-oxide</td>
<td>(CAS No) 2605-78-9</td>
<td>1 – 3</td>
<td>Skin Irr. 2, H315</td>
</tr>
<tr>
<td></td>
<td>(EC No) 567-854-9</td>
<td></td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H335</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 is 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. Extinguising 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>United Kingdom WEL TWA (mg/m³)</td>
</tr>
<tr>
<td>United Kingdom WEL STEL (mg/m³)</td>
</tr>
<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 googles or safety glasses.
Revital-Ox Bedside Concentrate™
Safety Data Sheet
according to Regulation (EC) No. 453/2010

<table>
<thead>
<tr>
<th>Skin and body protection</th>
<th>Wear suitable protective clothing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection</td>
<td>Work in well-ventilated zones or use proper respiratory protection. In fine dispersion/spraying/misting: Wear suitable respiratory equipment.</td>
</tr>
<tr>
<td>Other information</td>
<td>Do not eat, drink or smoke during use.</td>
</tr>
</tbody>
</table>

**SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

- Physical state: Liquid
- Colour: Straw, clear to slight haze
- 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: No data available
- 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

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>Revital-Ox Bedside Concentrate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>Not established</td>
</tr>
</tbody>
</table>
**Revital-Ox Bedside Concentrate™**
Safety Data Sheet
according to Regulation (EC) No. 453/2010

### LD50 dermal rat
Not established

### Subtilisins (proteolytic enzymes) (9014-01-1)

| LD50 oral rat | 3700 mg/kg |
| ATE CLP (oral) | 3700.000 mg/kg body weight |

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.
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
Ecology - general: Readily biodegradable. (OECD 301B method). The surfactant(s) contained in this preparation 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.

#### 12.2. Persistence and degradability

| Revital-Ox Bedside Concentrate |
| Persistence and degradability | The surfactant(s) contained in this preparation 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. |
| 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

| Revital-Ox Bedside Complete™ |
| 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

14.1. UN number
- No dangerous good in sense of transport regulations.

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
- 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
- No REACH Annex XVII restrictions
- Contains no REACH candidate substance > 0.1 % / SCL.

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: 08/28/2019

Other information: None.

Full text of H-phrases: None.
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according to Regulation (EC) No. 453/2010

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. 2B Serious eye damage/eye irritation, Category 2B
Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
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
H319 Causes serious eye irritation
H320 Causes serious eye damage
H334 May be harmful if inhaled
H335 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H318 May cause respiratory irritation
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard: 0 - Materials that will not burn.
NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

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.