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

### 1.1. Product identifier

- **Product form**: Mixture
- **Trade name**: Steraffirm Control Tubes (Autoclaves)
- **Product code**: PCC024, PCC025, PCC026

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

- **Use of the substance/mixture**: Sterilization
- **Use of the substance/mixture**: For industrial and institutional use only. Not for home use.

### 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: 1-800-444-9009 (Customer Service-Scientific 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**: 1-800-424-9300 (CHEMTREC)

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**SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

**GHS-US Classification**
Not Classified
Full text of H-phrases: see section 16

### 2.2. OSHA defined hazards

None.

**Adverse physicochemical, human health and environmental effects**
No additional information available

### 2.3. Label elements

**GHS-US labelling**
- Hazard pictograms (GHS-US): Not Applicable
- Signal word (GHS-US): Not Applicable
- Hazard statements (GHS-US): Not Applicable
- Precautionary statements (GHS-US): Not Applicable

### 2.4. Other hazards

Not Applicable

### 2.5. Hazard(s) not otherwise classified (HNOC)

None known.

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**SECTION 3: Composition/information on ingredients**

### 3.1. Substance

Not applicable.

### 3.2. Mixture

Not applicable.
 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: In the case of tube breakage, the liquid should be washed from the skin using copious quantities of water. If skin irritation occurs: 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. In all cases of doubt, or when symptoms persist, seek medical advice.

First-aid measures after ingestion: If victim completely conscious/alert. Rinse mouth. Do NOT induce vomiting. Get medical advice/attention. 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: No additional information available.

Symptoms/injuries after skin contact: Frequent or prolonged contact with skin may cause dermal irritation.

Symptoms/injuries after eye contact: Frequent or prolonged contact with eyes may cause ocular irritation.

Symptoms/injuries after ingestion: No additional information available.

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 fire-extinguishing media appropriate for primary source of fire.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: 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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Do not breathe fumes, vapours. Avoid contact with skin, eyes and clothes. If spilled, may cause the floor to be slippery.

6.1.1. For non-emergency personnel

Protective equipment: Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures: Stop leak if safe to do so. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

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: Comply with applicable local and national regulations. Spills may be picked up with a mop and followed by a water rinse. Residue may be washed down with water. Small spills may be flushed to a sanitary sewer with copious amounts of water, 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. The Steraffirm Control Tubes are designed to be in autoclaves. When used in such devices, no inherent hazards are likely to present themselves.

Hygiene measures: Take care for general good hygiene and housekeeping. 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: Store between 0°C (32°F) - 21°C (70°F). Store in cool, dark, dry conditions before and after use.

Incompatible materials: No additional information available.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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. Use ventilation to keep exposure to airborne contaminants 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.

Eye protection: Wear chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Liquid
Colour: Red
odour: No data available
Odour threshold: No data available
pH: No data available
Relative evaporation rate (butyl acetate=1): No data available
Melting point: No data available
Freezing point: No data available
Steraffirm Control Tubes (Autoclaves)
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

<table>
<thead>
<tr>
<th>Property</th>
<th>Data Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

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
Do not expose tubes to naked flames, excessive internal pressure could lead to fracture and failure of the tubes.

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>May cause eye and skin irritation.</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

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
Symptoms/injuries after inhalation: In fine dispersion/spraying/misting: Inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.
Symptoms/injuries after skin contact: Frequent or prolonged contact with skin may cause dermal irritation.
Symptoms/injuries after eye contact: In fine dispersion/spraying/misting: This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists.

SECTION 12: Ecological information

12.1. Toxicity
   No additional information available
12.2. Persistence and degradability
   No additional information available
12.3. Bioaccumulative potential
   No additional information available
12.4. Mobility in soil
   No additional information available
12.5. Other adverse effects
   Other information: 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. Small spills may be flushed to a sanitary sewer with copious amounts of water, if in accordance with local, state or national legislation. Waste must be disposed of in accordance with federal, state, and local environmental control regulations. Ensure all national/local regulations are observed.
   Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

SECTION 15: Regulatory information

15.1. US Federal Regulations
   No additional information available
15.2. International Regulations
   No additional information available
15.3. US State Regulations
   No additional information available

Steraffirm Control Tubes (Autoclaves) do not contain any components derived from animal origin, do not come into contact with materials of animal origin and therefore comply with the “Note for guidance of minimizing the risk of transmitting animal spongiform encephalopathy agents via human Veterinary medicinal products (EMEA/410/01 Rev. 2-October 2003).”

SECTION 16: Other information

Revision date: 02/16/2018

Full text of H-phrases:

H227 Combustible liquid
Steraffirm Control Tubes (Autoclaves)  
Safety Data Sheet  
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

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 under typical fire conditions (e.g. carbon dioxide), including intrinsically noncombustible materials such as concrete, stone and sand (Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes)

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

SDS US (GHS HazCom 2012)  
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.