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

1.1. Product identifier

- **Product form**: Mixture
- **Trade name**: Glass-Klenz – Glassware Detergent
- **Product code**: 1114

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

- **Industrial/Professional use spec**: Glassware Detergent
- **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

- **STERIS Corporation**
- **P. O. Box 147, St. Louis, MO 63166, US**
- **Telephone Number for Information**: 1-800-444-9009 (Customer Service-Scientific Products)

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 Corr/Irrit 3: H316
  - Eye Dam. 2B: H320

2.2. Label elements

- **GHS-US labelling**
  - **Hazard pictograms (GHS-US)**: Not Applicable
  - **Signal word (GHS-US)**: Warning
  - **Hazard statements (GHS-US)**: H316 – Causes mild skin irritation
  - **Precautionary statements (GHS-US)**: P264 - Wash hands thoroughly after handling
  - 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 advice / attention.
  - P337 + P313 – If eye irritation persists: Get medical advice / attention.

2.3. Other hazards

- **No additional information available.**

2.4. Unknown acute toxicity (GHS-US)

- **No data 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>Tetrasodium EDTA</td>
<td>(CAS No) 64-02-8 (REACH No) 01-2119486762-27-0018</td>
<td>10 - 30</td>
<td>Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Tolytriazole, sodium salt</td>
<td>(CAS No) 64665-57-2</td>
<td>~ 0.35</td>
<td>Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318</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 to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/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. 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 swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Give water to drink if victim completely conscious/alert. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries after eye contact: Causes eye irritation.

Symptoms/injuries after ingestion: Ingestion is not considered a potential route of exposure. May cause irritation of the linings of the mouth, throat, and gastrointestinal tract.

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


5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Stop leak if safe to do so. Avoid contact with skin, eyes and clothes.

6.1.1. For non-emergency personnel

Protective equipment: Wear suitable protective clothing.

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: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Local authorities should be advised if significant spillages cannot be contained. Small spillages: 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.

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. Product for industrial use only. Avoid breathing dust, mist or spray. Avoid contact with skin and eyes. Never return unused material to original container.

Hygiene measures: Wash hands thoroughly after handling. Take care for general good hygiene and housekeeping. Do not eat, drink or smoke when using this product. Wash contaminated clothing prior to re-use. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Comply with applicable regulations. A washing facility/water for eye and skin cleaning purposes should be present. Provide adequate ventilation.

Storage conditions: Keep out of reach of children. Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Incompatible materials: Strong acid. Oxidizing agent. Soft metals such as aluminum. May react with soft metals to evolve flammable hydrogen gas.

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

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 event of any potential exposure. Ensure adequate ventilation.

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 or nitrile 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. Work in well-ventilated zones or use proper respiratory protection.

Environmental exposure controls: Avoid discharge to the environment.

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
Appearance: Clear
Color: Orange
Glass-Klenz
Glassware Detergent
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Odor : Mild chemical odor
Odor threshold : No data available
pH : 13.14
pH solution : 10.9 - 11.6 (1% solution)
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
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Density : 1.14 g/ml @ 25°C
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 polymerisation does not occur.

10.4. Conditions to avoid
No additional information available.

10.5. Incompatible materials
Strong acid. Oxidizing agent. Soft metals such as aluminum.

10.6. Hazardous decomposition products
May react with soft metals to evolve flammable hydrogen gas.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

Tolytriazole, sodium salt (64665-57-2)
ATE CLP (oral) : 500.000 mg/kg bodyweight

Tetrasodium EDTA (64-02-8)
LD50 oral rat : 1658 mg/kg
ATE CLP (oral) : 500.000 mg/kg bodyweight
Glass-Klenz
Glassware Detergent
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Skin corrosion/irritation: Causes mild skin and eye irritation
pH: 13.14

Serious eye damage/irritation: Causes eye irritation
pH: 13.14

Respiratory or skin sensitisation: Not classified
Based on available data, the classification criteria are not met

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

Potential Adverse human health effects and symptoms: Not classified
Based on available data, the classification criteria are not met

Symptoms/injuries after eye contact: Causes serious eye damage

Symptoms/injuries after ingestion: Ingestion is not considered a potential route of exposure. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

SECTION 12: Ecological information

12.1. Toxicity

Tetrasodium EDTA (64-02-8)
LC50 fishes 1 41 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 fish 2 59.8 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and degradability

Glass-Klenz – Glassware Detergent
Persistence and degradability: The surfactant(s) contained in this preparation complies(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.

12.3. Bioaccumulative potential

Glass-Klenz – Glassware Detergent
Bioaccumulative potential: Not established.

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. Empty containers should be rinsed and discarded in a waste container or offered for recycling if possible.

Additional information: Dispose of empty containers and wastes safely.

Ecology - waste materials: Avoid release to the environment.
# Glass-Klenz
Glassware Detergent
Safety Data Sheet
according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

<table>
<thead>
<tr>
<th>SECTION 14: Transport information</th>
</tr>
</thead>
<tbody>
<tr>
<td>In accordance with DOT</td>
</tr>
<tr>
<td>Not regulated for transport.</td>
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</tbody>
</table>

**Additional information**

<table>
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<tr>
<th>Other information</th>
<th>: No supplementary information available.</th>
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</table>

**ADR**

<table>
<thead>
<tr>
<th>Transport document description</th>
<th>: No additional information available.</th>
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</thead>
</table>

**Transport by sea**

<table>
<thead>
<tr>
<th>No additional information available.</th>
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</table>

**Air transport**

<table>
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<th>No additional information available.</th>
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# SECTION 15: Regulatory information

## 15.1. US Federal regulations

<table>
<thead>
<tr>
<th>Tolyltriazole, sodium salt (64665-57-2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
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</tbody>
</table>

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<tr>
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<tbody>
<tr>
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</tbody>
</table>

## 15.2. International regulations

<table>
<thead>
<tr>
<th>Not applicable.</th>
</tr>
</thead>
</table>

## 15.3. US State regulations

<table>
<thead>
<tr>
<th>Not applicable.</th>
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</table>

# SECTION 16: Other information

**Revision Date**

<table>
<thead>
<tr>
<th>09/27/2018</th>
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</thead>
</table>

**Other information**

<table>
<thead>
<tr>
<th>None.</th>
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</thead>
</table>

**Full text of H-phrases:**

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1A</td>
<td>Skin corrosion/irritation Category 1A</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation Category 1B</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H316</td>
<td>Causes mild skin irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
</tbody>
</table>

**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 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.