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

1.1. Product identifier
Product form: Mixture
Trade name: Valsure® Neutral Detergent
Product code: 1C54

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

1.2.1. Relevant identified uses
Industrial/Professional use spec: Manual/pre-cleaning, ultrasonics, hospital washer/disinfectors and automated mechanical washer applications for processing appropriate medical devices including surgical instruments. For professional use only.

Use of the substance/mixture: Neutral Detergent

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_msds@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]
Skin Irrit. 2  H315
Eye Irrit. 2A  H319
Full text of H-phrases: see Section 16.

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

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard Pictograms (CLP):

Signal Word (CLP): Warning
Hazard statements (CLP):
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP):
P264 - Wash thoroughly after handling
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.
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.
2.3. Other hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. This product contains trace amounts of formaldehyde. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

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>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid</td>
<td>(CAS No) 77-92-9</td>
<td>1.51</td>
<td>Comb. Dust Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

(RANGE NO) 01-2119457026-42-0067

Full text of H-phrases: see Section 16.

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. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Get medical advice and attention.

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

Symptoms/Injuries: Causes irritation.
Symptoms/Injuries After Inhalation: May cause irritation to the respiratory tract.
Symptoms/injuries after skin contact: Causes skin irritation.
Symptoms/injuries after eye contact: Causes serious eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: None expected under normal conditions of use.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special hazards arising from the substance or mixture

Fire Hazard: Not flammable.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting instructions: Do not allow run-off from fire fighting to enter drains or water sources. Do not breathe fumes from fires or vapors from decomposition. Use water spray or fog for cooling exposed containers.

Protective equipment for firefighters: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂).

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Handle in accordance with good industrial hygiene and safety practice.

6.1.1. For non-emergency personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

6.1.2. For emergency responders

Protective equipment: Use appropriate personal protection equipment (PPE).
Emergency procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up: Clear up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container for disposal. 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 National and local 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. Avoid all eyes and skin contact and do not breathe vapor and mist. Use appropriate personal protection equipment (PPE).
Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

7.3. Specific end use(s)

Manuel/pre-cleaning, ultrasonics, hospital washer/disinfectors and automated mechanical washer applications for processing appropriate medical devices including surgical instruments. For professional use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency.

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. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Materials for Protective Clothing: Chemically resistant materials and fabrics.
Hand protection: Wear chemically resistant protective gloves.
Eye protection: Wear chemical goggles or safety goggles.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Not necessary under normal conditions. If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.
Consumer Exposure Controls: 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>Appearance</td>
<td>Clear, colorless liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<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>Specific Gravity</td>
<td>1.015 - 1.027 g/mL</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Completely soluble</td>
</tr>
<tr>
<td>Log Pow</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>Explosion Data – Sensitivity to Mechanical Impact</td>
<td>Not expected to present an explosion hazard due to mechanical impact</td>
</tr>
<tr>
<td>Explosion Data – Sensitivity to Static Discharge</td>
<td>Not expected to present an explosion hazard due to static discharge</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Incompatible materials.

10.5. Incompatible materials


10.6. Hazardous decomposition products


SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Valsure® Neutral Detergent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Citric acid (77-92-9)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral Rat</td>
<td>5400 mg/kg</td>
</tr>
<tr>
<td>LD50 Dermal Rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Causes skin irritation
pH: 6 - 8
Valsure® Neutral Detergent
Safety Data Sheet
according to Regulation (EC) No. 453/2010

SECTION 1: Identification
Classification and Labeling

SECTION 2: GHS Classification and Labelling elements

SECTION 3: Hazards Identification
Hazard classification and labelling

SECTION 4: First Aid Measures
Inhalation
Skin Contact
Eye Contact
Ingestion
Symptoms and Effects
Chronic Effects

SECTION 5: Technical Information
Environmental Information

SECTION 6: Accidental Release Measures
Spill Response
Fire-fighting Measures
Special Protective Equipment

SECTION 7: Handling and Storage
Precautions for Users

SECTION 8: Exposition Control / Personal Protection
Control Parameters
Exposure Control Measures
Protection Equipment

SECTION 9: Physical and Chemical Properties

SECTION 10: Stability and Reactivity
Stability
Reaction Conditions

SECTION 11: Toxicological Information
Acute Toxicity
Inhalation
Ingestion
Skin Contact
Eye Contact
Health Hazard Classifications
Hazard Classification
Guidance for Medicals Personnel

SECTION 12: Ecological Information
12.1. Toxicity
12.2. Persistence and Degradability
12.3. Bioaccumulative Potential
12.4. Mobility in Soil
12.5. Results of PBT and vPvB assessment
12.6. Other Adverse Effects

SECTION 13: Disposal Considerations
Waste Disposal Recommendations

SECTION 14: Transport Information
UN Number
UN Proper Shipping Name

10/10/2018
EN (English)
SDS Ref: 1C54UK
5/6
14.3. Transport hazard class(es)
Not regulated for transport

14.4. Packing group
Not regulated for transport

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
Transport category (ADR): Non-hazardous

14.6.2. Transport by sea
IMDG Class: Non-hazardous

14.6.3. Air transport
ICAO/IATA Class: Non-hazardous

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
Contains no REACH candidate substance

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: 10/10/2018
Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Full text of H- and EUH-phrases:

<table>
<thead>
<tr>
<th>Comb. Dust</th>
<th>Combustible Dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Skin Irrit 2A</td>
<td>Skin corrosion/irritation Category 2A</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

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.