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

1.1. Product identifier

Product form : Mixture
Trade name : CIP 220®
Product code : 1D22
Product group : Trade product

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 : Acid-Based Process and Research Cleaner

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: 1-800-444-9009 (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 X86S
Ireland.
Product/Technical Information Phone No: +44 (0) 116 276 8636
Email: asksteris_msd@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]
Acute Tox. 4 (Oral) H302
Skin Corr. 1B H314
Eye Dam. 1 H318

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) : Danger
Hazard statements (CLP) : H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
Precautionary statements (CLP) : P260 - Do not breathe mist, spray, vapours, fume
P280 - Wear protective gloves/protective clothing and eye/face protection
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
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>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydroxyacetic acid</td>
<td>(CAS No) 79-14-1</td>
<td>10 - 30</td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist),</td>
</tr>
<tr>
<td></td>
<td>(EC no) 201-180-5</td>
<td></td>
<td>H332 Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td>(REACH No) 01-2119485579-17-0012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. 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: Do NOT induce vomiting. If victim completely conscious/alert. Rinse mouth. Give water or milk if the person is fully conscious. Immediately call a POISON CENTER or doctor/physician

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Symptoms may be delayed. Corrosive to eyes and skin. Causes severe skin burns and eye damage
Symptoms/injuries after inhalation: May be irritating to the mucous membranes and to the respiratory system
Symptoms/injuries after skin contact: Corrosive to eyes and skin. May cause severe burns
Symptoms/injuries after eye contact: Causes serious eye damage
Symptoms/injuries after ingestion: May cause burns or 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. Foam. Dry powder. Carbon dioxide. Sand
Unsuitable extinguishing media: Do not use a heavy water stream

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

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
6.1. 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: Stop leak if safe to do so. 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: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Leftovers: neutralize with sodium bicarbonate. Neutralise with dry sodium carbonate. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Absorb spillage to prevent material damage. Collect spillage. Store away from other materials. Comply with applicable local, national and international regulation

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. 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

Incompatible materials: Strong alkalis. Strong oxidizing agents. Chlorine

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

No additional information available

8.2. Exposure controls

Appropriate engineering controls: Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure

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. The following pictograms represent the minimum requirements for personal protective equipment. Protective clothing. Gloves. Protective goggles

Hand protection: Wear rubber gloves

Eye protection: Wear chemical splash goggle

Skin and body protection: Wear suitable protective clothing. Wear long sleeves. Boots

Respiratory protection: Work in well-ventilated zones or use proper respiratory protection. Wear appropriate mask

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
CIP 220®
Safety Data Sheet
according to Regulation (EC) No. 453/2010

Appearance: Clear
Colour: Colourless to slightly yellow
Odour: Slight acidic odour
Odour threshold: No data available
pH: 2.6 – 3.1 (1% solution)
pH solution: 2.6 – 3.1 (1% solution)
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Self 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: ca. 1.1 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
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
Thermal decomposition generates: Corrosive vapours

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
Extremely high or low temperatures

10.5. Incompatible materials
Strong alkalis. Strong oxidizers. Chlorine

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Harmful if swallowed

CIP 220®
LD50 oral rat > 1000 mg/kg

Hydroxyacetic acid (79-14-1)
LD50 oral rat 1950 mg/kg
LC50 inhalation rat (mg/l) 7100 µg/m³ (Exposure time: 4 h)
ATE (oral) 1950,000 mg/kg bodyweight
ATE (dust,mist) 3,600 mg/l/4h

Skin corrosion/irritation: Causes severe skin burns and eye damage
2.6 – 3.1 (1% solution)
Serious eye damage/irritation: Causes serious eye damage
Causes severe skin burns and eye damage
2.6 – 3.1 (1% solution)

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: Harmful if swallowed

SECTION 12: Ecological information

12.1. Toxicity

Hydroxyacetic acid (79-14-1)
LC50 fishes 1 > 5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [Static])

12.2. Persistence and degradability

CIP 220®
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

CIP 220®
Bioaccumulative potential: Not established

Hydroxyacetic acid (79-14-1)
Log Pow -1.11 (at 19 °C)

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
Additional information: Unused product: Hazardous waste (corrosive) based on pH
Ecology - waste materials: Avoid release to the environment

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

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

10/30/2018 EN (English) SDS Ref: 1D22UK
CIP 220®
Safety Data Sheet
according to Regulation (EC) No. 453/2010

### 14.4. Packing group
Not applicable

### 14.5. Environmental hazards

| 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

#### 14.7. 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

##### 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 | : 10/30/2018 |
| Other information | : None |

Full text of H- and EUH-phrases:

| Acute Tox. 4 (Inhalation:dust,mist) | Acute toxicity (inhalation:dust,mist), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B |
| H302 | Harmful if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |
| H332 | Harmful if inhaled |

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.