

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

1.1. Product identifier

Product form : Mixture
 Trade name : Cage-Klenz® 220 Acid-Based Cage Wash Detergent
 Product code : 1K22

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

Use of the substance/mixture : Acid-Based Process and Research Cleaner

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

Acute Tox. 4 (Oral) H302
 Skin Corr. 1B H314
 Eye Dam. 1 H318

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) :

P260 - Do not breathe mist, spray, vapours
 P280 - Wear protective gloves/protective clothing and eye/face protection
 P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 P304+P340 - IF INHALED: Remove person to fresh air and keep 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

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Hydroxyacetic acid	(CAS No) 79-14-1	10 - 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314

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according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

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

Hazardous decomposition products in case of fire : Thermal decomposition generates: Fume. Carbon monoxide. Carbon dioxide.

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

6.1.1. 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

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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

8.2. 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. 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
- 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

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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

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LD50 oral rat	> 1000 mg/kg
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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 pH: 2.6 – 3.1 (1% Solution)
Serious eye damage/irritation	: Causes serious eye damage. pH: 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

Hydroxyacetic acid (79-14-1)

National Toxicity Program (NTP) Status	1
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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

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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])
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12.2. Persistence and degradability

Cage-Klenz® 220 Acid-Based Cage Wash 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
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12.3. Bioaccumulative potential

Cage-Klenz® 220 Acid-Based Cage Wash Detergent

Bioaccumulative potential	Not established
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Hydroxyacetic acid (79-14-1)

Log Pow	-1.11 (at 19 °C)
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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
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 DOT

14.3. Additional information

Other information : No supplementary information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Hydroxyacetic acid (79-14-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

Not applicable

SECTION 16: Other information

Revision Date	: 08/11/2016
Other information	: None

Full text of H-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

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H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled

NFPA health hazard

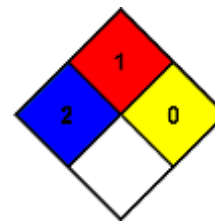
: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

1 - Must be preheated before ignition can occur.

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.