

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

1.1. Product identifier

Product form : Mixture
 Trade name : LabKlenz® 100 Alkaline Detergent
 Product code : 1L10

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

Use of the substance/mixture : Alkaline Detergent

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. 1A H314
 Eye Dam. 1 H318

Full text of H-phrases: see section 16

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
 P264 - Wash hands thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P280 - Wear protective gloves/protective clothing and eye/face protection.
 P301+P312 - If swallowed, call a doctor if you feel unwell
 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
 P363 - Wash contaminated clothing before reuse
 P501 - Dispose of contents/container to comply with applicable local, national and international regulation

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

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3.2. Mixture

Name	Product identifier	%	GHS-US classification
Tetrasodium EDTA	(CAS No) 64-02-8	7 - 13	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Potassium hydroxide	(CAS No) 1310-58-3	1 - 5	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Sodium hydroxide	(CAS No) 1310-73-2	< 0.5	Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314

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. Immediately get medical attention. If not breathing, give artificial respiration
- First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. In all cases of doubt, or when symptoms persist, seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing
- First-aid measures after ingestion : Rinse mouth. Give water to drink if victim completely conscious/alert. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician

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

- Symptoms/injuries : Causes severe skin burns and eye damage
- Symptoms/injuries after skin contact : Severe skin irritant. Effects of skin contact may include: irritation and burn feeling
- Symptoms/injuries after eye contact : Causes serious eye damage. Direct contact may cause severe irritation, pain and burns, possibly severe, and permanent damage including blindness
- 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. Water spray. 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. Nitrogen oxides

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
- Other information : Do not mix with: chlorinated products as this could liberate toxic corrosive chlorine gas

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Do not breathe fumes, vapors. 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. Wear protective gloves and eye/face protection. Boots
- 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

- For containment : Contain leaking substance, pump over in suitable containers

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- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Neutralise spill carefully with any weak acid and flush remainder with plenty of water. Collect spillage. Store away from other materials. Local authorities should be advised if significant spillages cannot be contained

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. Provide good ventilation in process area to prevent formation of vapour. Do not breathe gas, fumes, vapour or spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. 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 only in the original container in a cool, well ventilated place. Keep container closed when not in use
- Incompatible materials : Acids. Oxidizing agents. Organic compounds. Halogenated compounds. Chromium. Magnesium. Zinc. On contact with ordinary metals (steel, galvanized, aluminium) corrosion may occur and generate highly flammable hydrogen gas
- Heat and ignition sources : Store away from excessive heat . Remove all sources of ignition
- 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

Potassium hydroxide (1310-58-3)		
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³

Sodium hydroxide (1310-73-2)		
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³

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. Local exhaust ventilation is recommended to maintain vapor level below the threshold limit value (TLV). 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 protective gloves, rubber or plastic gloves
- Eye protection : Chemical goggles or face shield
- Skin and body protection : Wear suitable protective clothing. Rubber apron, boots
- Respiratory protection : Work in well-ventilated zones or use proper respiratory protection. Wear appropriate mask
- 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

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Appearance	: Clear
Color	: Colorless. light yellow
Odor	: Mild odor
Odor threshold	: No data available
pH	: 11 - 12
pH solution	: 1 %
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	: 1.15 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

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

Incompatible materials. Keep away from heat. Direct sunlight

10.5. Incompatible materials

On contact with ordinary metals (steel, galvanized, aluminium) corrosion may occur and generate highly flammable hydrogen gas. Acids. Oxidizing agent. Organic materials. Halogenated compounds. Magnesium. Zinc. Chromium

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed

LabKlenz® 100 Alkaline Detergent	
ATE (oral)	1000,000 mg/kg bodyweight
Potassium hydroxide (1310-58-3)	
LD50 oral rat	214 mg/kg
ATE (oral)	500,000 mg/kg bodyweight
Sodium hydroxide (1310-73-2)	
LD50 dermal rabbit	1350 mg/kg

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Sodium hydroxide (1310-73-2)	
ATE (dermal)	1350,000 mg/kg bodyweight
Tetrasodium EDTA (64-02-8)	
ATE (oral)	500,000 mg/kg bodyweight

Skin corrosion/irritation	: Causes severe skin burns and eye damage pH: 11 - 12
Serious eye damage/irritation	: Causes serious eye damage pH: 11 - 12
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

SECTION 12: Ecological information

12.1. Toxicity

Potassium hydroxide (1310-58-3)	
LC50 fishes 1	80 mg/l (Exposure time: 96 h - Species: Gambusia affinis [Static])
Sodium hydroxide (1310-73-2)	
LC50 fishes 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [Static])
Tetrasodium EDTA (64-02-8)	
LC50 fishes 1	41 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [Static])
EC50 Daphnia 1	610 mg/l (Exposure time: 24 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	1.01 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
LC50 fish 2	59.8 mg/l (Exposure time: 96 h - Species: Pimephales promelas [Static])

12.3. Bioaccumulative potential

LabKlenz® 100 Alkaline Detergent	
Bioaccumulative potential	Not established
Potassium hydroxide (1310-58-3)	
Log Pow	0.65

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No additional information available

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	: Dispose of empty containers and wastes safely. Hazardous waste (corrosive) based on pH
Ecology - waste materials	: Avoid release to the environment

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

UN-No.(DOT)	: 1814
DOT NA no.	UN1814

14.2. UN proper shipping name

DOT Proper Shipping Name	: UN1814 Potassium Hydroxide Solution, 8, II
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14.3. Additional information

Other information : No supplementary information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Potassium hydroxide (1310-58-3)

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

Sodium hydroxide (1310-73-2)

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

Tetrasodium EDTA (64-02-8)

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

15.2. National regulations

Not applicable

15.3. US State regulations

Not applicable

SECTION 16: Other information

Revision Date : 04/02/2015

Other information : None

Full text of H-phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions , including intrinsically noncombustible materials such as concrete, stone and sand.

NFPA reactivity : 1 - Normally stable, even under fire exposure conditions, and is 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.