Valsure® Alkaline Detergent

STERIS®

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 2/9/2017 Version: 1.0

SECTION 1: Identification

1.1. Product Identifier

Product Form: Mixture
Product Name: Valsure® Alkaline Detergent
Product Code: 1C50

1.2. Intended Use of the Product

Use of the substance/mixture: Alkaline Detergent. For professional use only.

1.3. Name, Address, and Telephone of the Responsible Party

Company
STERIS Corporation
Official Mailing Address:
P.O. Box 147
St. Louis, MO 63166 USA

Street Address:
7501 Page Avenue
St. Louis, MO 63133 USA

Telephone Number for Information: 1-800-548-4873 (Customer Service-Healthcare Products)
web: www.steris.com
email: asksteris_msds@steris.com

1.4. Emergency Telephone Number

Emergency Number : 1-314-535-1395 or CHEMTREC: 1-800-424-9300

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Skin Corr. 1A H314
Eye Dam. 1 H318

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS05

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.

Precautionary Statements (GHS-US) : P260 - Do not breathe vapors, mist, spray.
P264 - Wash exposed areas thoroughly after handling.
P280 - Wear protective clothing, protective gloves, face protection, eye protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position 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.
P310 - Immediately call POISON CENTER/doctor.
P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

Other Hazards: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: Composition/information On Ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)

Tetrasodium EDTA	(CAS No) 64-02-8	1 - 5	Comb. Dust Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:mist), H332 Eye Dam. 1, H318 Aquatic Acute 2, H401
Sodium hydroxide	(CAS No) 1310-73-2	1 - 5	Met. Corr. 1, H290 Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

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.
First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-aid Measures After Skin Contact: Immediately flush skin with plenty of water for at least 60 minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.
First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician.
First-aid Measures After Ingestion: Rinse mouth. 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 Inhalation: Contact may cause immediate severe irritation progressing quickly to chemical burns.
Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical 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.
Chronic Symptoms: None known.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: 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

Firefighting Instructions: Exercise caution when fighting any chemical fire.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
Hazardous Combustion Products: Carbon oxides (CO, CO_2). Nitrogen oxides.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Do not allow product to spread into the environment.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).
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. Avoid release to the environment.

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. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.
Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. After cleaning, flush traces away with water.

6.4. Reference to Other Sections

See Section 8: Exposure Controls and Personal Protection.

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals.
Precautions for Safe Handling: Avoid all eye and skin contact and do not breathe vapor and mist. Wear recommended personal protective equipment.
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. Storage areas should be periodically checked for corrosion and integrity.
Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

7.3. Specific End Use(s)

Alkaline Detergent. For professional use only.

SECTION 8: Exposure Controls/personal Protection

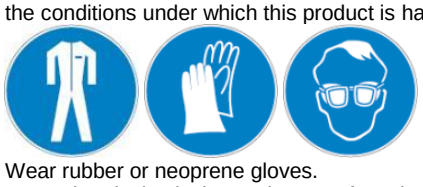
8.1. Control Parameters

Sodium hydroxide (1310-73-2)		
USA ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	2 mg/m³
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	2 mg/m³
USA IDLH	US IDLH (mg/m³)	10 mg/m³
Alberta	OEL Ceiling (mg/m³)	2 mg/m³
British Columbia	OEL Ceiling (mg/m³)	2 mg/m³
Manitoba	OEL Ceiling (mg/m³)	2 mg/m³
New Brunswick	OEL Ceiling (mg/m³)	2 mg/m³
Newfoundland & Labrador	OEL Ceiling (mg/m³)	2 mg/m³
Nova Scotia	OEL Ceiling (mg/m³)	2 mg/m³
Nunavut	OEL Ceiling (mg/m³)	2 mg/m³
Northwest Territories	OEL Ceiling (mg/m³)	2 mg/m³
Ontario	OEL Ceiling (mg/m³)	2 mg/m³
Prince Edward Island	OEL Ceiling (mg/m³)	2 mg/m³
Québec	PLAFOND (mg/m³)	2 mg/m³
Saskatchewan	OEL Ceiling (mg/m³)	2 mg/m³
Yukon	OEL Ceiling (mg/m³)	2 mg/m³

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. Provide 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. Wear protective clothing.



Hand Protection : Wear rubber or neoprene gloves.
Eye Protection : Wear chemical splash goggles or safety glasses.
Skin and Body Protection : Wear suitable protective clothing, rubber apron, boots, and face shield if necessary.
Respiratory Protection : In case of insufficient ventilation, wear suitable respiratory equipment.
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, water white to light straw homogeneous liquid
Odor	: None
Odor Threshold	: No data available
pH	: 13.1 (Neat), 11.2 - 12.2 (1% Solution)
Evaporation rate	: 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
Specific Gravity	: 1.0765 - 1.0865
Solubility	: Complete in water
Partition coefficient: n-octanol/water	: No data available

Viscosity	:	No data available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.
Corrosion Rate	:	< 250 mpy (< 0.25 inch/year) Aluminum and Steel (55 °C, 168 hours)

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:

The product is stable at normal handling and storage conditions.

10.3 Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4 Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

10.5 Incompatible Materials:

Strong acids. Strong oxidizers.

10.6 Hazardous Decomposition Products:

Thermal decomposition generates: Corrosive vapors.

SECTION 11: Toxicological Information

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Sodium hydroxide (1310-73-2)	
LD50 Dermal Rabbit	1350 mg/kg

Tetrasodium EDTA (64-02-8)	
LD50 Oral Rat	1780 mg/kg
ATE (Dust/Mist)	1.50 mg/l/4h

Skin Corrosion/Irritation: Causes severe skin burns and eye damage. [pH: 13.1 (Neat), 11.2 - 12.2 (1% Solution)]
Serious Eye Damage/Irritation: Causes serious eye damage. [pH: 13.1 (Neat), 11.2 - 12.2 (1% Solution)]
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: No data available
Carcinogenicity: Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Contact may cause immediate severe irritation progressing quickly to chemical burns.
Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical 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.
Chronic Symptoms: None known.

SECTION 12: Ecological Information

12.1. Toxicity

Ecology - General : Harmful to aquatic life.

Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l

Tetrasodium EDTA (64-02-8)	
LC50 Fish 1	41 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC 50 Fish 2	59.8 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
ErC50 (algae)	2.77 mg/l (72hr species: Desmodesmus subspicatus)

12.2. Persistence and Degradability

Valsure® Alkaline 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

Valsure® Alkaline Detergent	
Bioaccumulative Potential	Not established.

Tetrasodium EDTA (64-02-8)	
Log Pow	5.01 (calculated)

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: Product may be flushed to a sanitary sewer with copious amounts of water, if in accordance with local, state, or national legislation. Dispose in a safe manner in accordance with local/national regulations. Do not allow to enter into surface water or drains. Ensure all national/local regulations are observed.

SECTION 14: Transport Information

14.1 In Accordance with DOT

Not regulated for transport

14.2 In Accordance with IMDG

Not regulated for transport

14.3 In Accordance with IATA

Not regulated for transport

14.4 In Accordance with TDG

Not regulated for transport

SECTION 15: Regulatory Information

15.1 US Federal Regulations

Valsure® Alkaline Detergent	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

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 US State Regulations

Sodium hydroxide (1310-73-2)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

Sodium hydroxide (1310-73-2)
Listed on the Canadian DSL (Domestic Sustances List) Listed on the Canadian IDL (Ingredient Disclosure List)

Tetrasodium EDTA (64-02-8)
Listed on the Canadian DSL (Domestic Sustances List)

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by HPR.

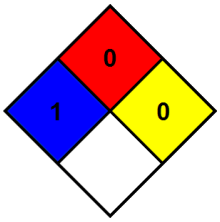
SECTION 16: Other Information, Including Date Of Preparation Or Last Revision

Revision Date 2/9/2017
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H401	Toxic to aquatic life
H402	Harmful to aquatic life

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.



Party Responsible for the Preparation of This Document
STERIS Corporation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS NA, Mex GHS