### **CP-310**<sup>™</sup>

# STERIS Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Version: 1.0 Date of issue: 02/25/2016

SECTION 1: Identification	
1.1. Product Identifier	
Product Form: Mixture Product Name: CP-310™ Alkaline Process & Research Cleaner Product Code: 1K74	
1.2. Intended Use of the Product	
Use of the substance/mixture: Alkaline Process	s & Research Cleaner. 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: 1-800-444 web: <u>www.steris.com</u> email: <u>asksteris_msds@steris.com</u>	-9009 (Customer Service-Scientific Products)
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	
Classification (GHS-US)Met. Corr. 1H290Acute Tox. 4 (Oral)H302Skin Corr. 1AH314Eye Dam. 1H318	
2.2. Label Elements	
GHS-US Labeling Hazard Pictograms (GHS-US)	: GHS05 GHS07
Signal Word (GHS-US) Hazard Statements (GHS-US)	<ul> <li>Danger</li> <li>H290 - May be corrosive to metals.</li> <li>H302 - Harmful if swallowed.</li> <li>H314 - Causes severe skin burns and eye damage.</li> <li>H318 - Causes serious eye damage.</li> </ul>
Precautionary Statements (GHS-US)	<ul> <li>P260 - Do not breathe mist, spray, vapors.</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P280 - Wear eye protection, face protection, protective clothing, protective gloves.</li> <li>P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.</li> <li>P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.</li> <li>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.</li> <li>P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> </ul>
2.3. Unknown Acute Toxicity (GHS-US	)
	ngredient(s) of unknown acute toxicity (Oral, Dermal, Inhalation (Dust/Mist))
<b>SECTION 3: Composition/information</b>	on On Ingredients

### SECTION 3: Composition/information On Ingredients

3.1. Substance

Not applicable

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#### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Potassium hydroxide	(CAS No) 1310-58-3	10 - 30	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314 Eye Dam. 1, H318
Tetrasodium EDTA	(CAS No) 64-02-8	1 - 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 Inhalation:mist), H332 Eye Dam. 1, H318 Aquatic Acute 2, H401
Acrylic resin	(CAS No) 9003-01-4	0.1 - 1	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

#### 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. Immediately call a POISON CENTER or doctor/physician.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 30 minutes. Immediately call a POISON CENTER or doctor/physician. 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: Harmful if swallowed. Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Symptoms/Injuries After Inhalation: May be corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: Causes severe skin burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Swallowing a small quantity of this material will result in serious health hazard.

Chronic Symptoms: None expected under normal conditions of use.

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

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

#### SECTION 5: Fire-Fighting 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 considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive, however in contact with some metals may release explosive hydrogen gas.

Reactivity: Corrosive to metals. Reacts exothermically with (some) acids.

#### 5.3. Advice for Firefighters

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

Firefighting Instructions: Do not breathe fumes from fires or vapors from decomposition. Do not allow run-off from fire fighting to enter drains or water sources.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Hazardous Combustion Products: Carbon oxides (CO, CO<sub>2</sub>).

#### SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray.

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: Evacuate unnecessary personnel. Stop leak if safe to do so. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

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#### 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. Cautiously neutralize spilled liquid. Absorb spillage to prevent material damage. Collect absorbed material and place into a sealed, labelled container for proper disposal. After cleaning, flush traces away with water. Contact competent authorities after a spill.

#### 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: Do not breathe mist, spray, or vapor. Avoid contact with skin, eyes and clothing.

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. Do not eat, drink or smoke when using this product.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Avoid extremely high or low temperatures and incompatible materials. Store in original container.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

Packaging materials: Store in corrosive resistant container with a resistant inner liner.

#### 7.3. Specific End Use(s)

Alkaline Process & Research Cleaner. For professional use only. SECTION 8: Exposure Controls/personal Protection

#### 8.1. Control Parameters

Potassium hydroxide (1310-	-58-3)	
USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Alberta	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
British Columbia	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Manitoba	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
New Brunswick	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Nova Scotia	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Nunavut	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Northwest Territories	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Ontario	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Prince Edward Island	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Québec	PLAFOND (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Saskatchewan	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Yukon	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

#### 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.

Personal Protective Equipment

: Safety glasses. Face shield. Gloves. Protective goggles. Protective clothing.



Materials for Protective Clothing Hand Protection Eye Protection Skin and Body Protection Respiratory Protection : Chemically resistant materials and fabrics.

- : Wear chemically resistant protective gloves.
- Chemical goggles or safety glasses. Chemical goggles or face shield.
   Wear suitable protective clothing.
- : wear suitable protective clothing.
- : Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Consumer Exposure Controls

### ure Controls : Do not eat, drink or smoke during use.

#### **SECTION 9: Physical And Chemical Properties**

9.1. Information	on Basic Physical and Chemical Propert	ies	
Physical State	:	Liquid	
Appearance	:	Clear, light straw liquid	
Odor	:	Slight chemical	
Odor Threshold	:	No data available	
рН	:	12.3 - 12.8 - (1% Solution); >13 (Concentrated)	
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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	: 1.27 (water=1)
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.
9.2. Other Information	

VOC	content : < 1
SECT	ΓION 10: Stability And Reactivity
10.1	Reactivity:
Corr	osive to metals. Reacts exothermically with (some) acids.
10.2	Chemical Stability:
Stab	le under normal conditions.
10.3	Possibility of Hazardous Reactions:
Haza	ardous polymerization will not occur.
10.4	Conditions to Avoid:
Direc	ct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.
10.5	Incompatible Materials:
Stror	ng acids. Strong bases. Strong oxidizers. Metals. May be corrosive to metals.
10.6	Hazardous Decomposition Products:
	oon oxides (CO, CO <sub>2</sub> ). Potassium oxides. May produce flammable/explosive hydrogen gas on contact with metals or upon thermal mposition. Thermal decomposition generates : Corrosive vapors.
SEC1	ΓION 11: Toxicological Information
11.1.	Information On Toxicological Effects

Acute Toxicity: Harmful if swallowed.

CP-310™ Alkaline Process & Research Cleaner	
ATE (Oral)	1,177.73 mg/kg body weight
Potassium hydroxide (1310-58-3)	
LD50 Oral Rat	284 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: 12.3 - 12.8 (1% solution) Serious Eye Damage/Irritation: Causes serious eye damage. pH: 12.3 - 12.8 (1% solution) Respiratory or Skin Sensitization: Not classified Germ Cell Mutagenicity: Not classified Teratogenicity: Not classified 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: May be corrosive to the respiratory tract. Symptoms/Injuries After Skin Contact: Causes severe skin burns. Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Swallowing a small quantity of this material will result in serious health hazard.

Chronic Symptoms: None expected under normal conditions of use.

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SECTION 12: Ecological Inf	ormation	
12.1. Toxicity		
Ecology - General	: Harmful to aquatic life.	
12.2. Persistence and Degrad	lability	
CP-310™ Alkaline Process & Research Cle	aner	
Persistence and Degradability	Not established.	
12.3. Bioaccumulative Potent	tial	
CP-310™ Alkaline Process & Research Cle Bioaccumulative Potential	aner Not established.	
Potassium hydroxide (1310-58-3)		
Log Pow Tetrasodium EDTA (64-02-8)	0.65	
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 Con	siderations	
13.1. Waste treatment metho	ds	
Waste Disposal Recommendations regulations.	<ul> <li>This material is hazardous to the aquatic environment. Keep out of sewers and waterways.</li> <li>Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international</li> </ul>	
SECTION 14: Transport Info	prmation	
14.1 In Accordance with DOT		
Proper Shipping Name Hazard Class Identification Number Label Codes	POTASSIUM HYDROXIDE, SOLUTION 8 UN1814 8	
Packing Group ERG Number	: II : 154	
14.2 In Accordance with IMDG		
Proper Shipping Name Hazard Class Identification Number Packing Group Label Codes EmS-No. (Fire) EmS-No. (Spillage)	<ul> <li>POTASSIUM HYDROXIDE SOLUTION</li> <li>8</li> <li>UN1814</li> <li>II</li> <li>8</li> <li>F-A</li> <li>S-B</li> </ul>	
MFAG Number	: 154	
14.3 In Accordance with IATA		
Proper Shipping Name Packing Group Identification Number Hazard Class Label Codes	POTASSIUM HYDROXIDE SOLUTION II UN1814 8 8	
ERG Code (IATA)	: 8L	
14.4 In Accordance with TDG		
Proper Shipping Name Packing Group Hazard Class Identification Number Label Codes	POTASSIUM HYDROXIDE, SOLUTION II 8 UN1814 8	

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Immediate (acute) health hazard	
Act) inventory	
Act) inventory	
RTK - U.S Massachusetts - Right To Know List RTK - U.S New Jersey - Right to Know Hazardous Substance List	
RTK - U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
RTK - U.S Pennsylvania - RTK (Right to Know) List	

#### 15.3. Canadian Regulations

Potassium hydroxide (1310-58-3)
Listed on the Canadian DSL (Domestic Sustances List)
Listed on the Canadian IDL (Ingredient Disclosure List)
IDL Concentration 1 %
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	: 02/25/2016	
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. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Inhalation: 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
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled

NFPA	Health	Hazard
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NFPA Fire Hazard

NFPA Reactivity

3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
0 - Materials that will not burn.
1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



#### 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.