



# Liqui-Jet™ 2 Instrument Detergent

## Safety Data Sheet

In accordance with The Model Work Health and Safety Regulations, and the Globally Harmonized System of Classification  
Issue Date: 10/18/2019

Version: 1.0

### SECTION 1: PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL

#### 1.1 Product Identifier

Product Form: Mixture  
Product Name: Liqui-Jet™ 2 Instrument Detergent  
Product Code: 1037

#### 1.2 Intended Use of the Product

Instrument Detergent. For professional use only.

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

##### Manufacturer

STERIS Corporation  
P.O. Box 147  
St. Louis, MO 63166 USA  
Telephone Number for Information: 1-800-548-4873 (Customer Service-Healthcare Products)  
web: [www.steris.com](http://www.steris.com)  
email: [asksteris\\_msds@steris.com](mailto:asksteris_msds@steris.com)

##### Supplier

Device Technologies Australia Pty Ltd  
1 Garigal Road  
Belrose NSW 2085 Australia  
Telephone: 1800 429 551  
Fax: 612 9975 5711

Device Technologies New Zealand Ltd  
47 Arrenway Drive  
Albany Auckland 0632 New Zealand  
Telephone: 0508 338 423  
Fax: 649 913 2009

#### 1.4 Emergency Telephone Number

Emergency number : Australia: 1 800 429 551 (24 hours); New Zealand: 0508 338 423; CHEMTREC International: 1-703-741-5970

### SECTION 2: HAZARD IDENTIFICATION

#### 2.1 Classification of the Substance or Mixture

##### Classification according to NOHSC :

Hazardous Substance. Non-Dangerous Goods

##### Classification (GHS-AU)

Met. Corr. 1	H290
Skin Corr. 1B	H314
Eye Dam. 1	H318
STOT RE 2	H373
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

Full text of H-phrases: see section 16

#### 2.2 Label Elements

##### GHS-AU Labeling

Hazard Pictograms (GHS-AU) :



GHS05 - Corrosion



GHS08 - Health hazard

Signal Word (GHS-AU) :

Danger

Hazard Statements (GHS-AU) :

H290 - May be corrosive to metals.  
H314 - Causes severe skin burns and eye damage.  
H373 - May cause damage to organs through prolonged or repeated exposure.  
H402 - Harmful to aquatic life  
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-AU) :

P260 - Do not breathe vapours, mist, spray.  
P264 - Wash hands thoroughly after handling.

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P280 - Wear protective clothing, protective gloves, eye protection, 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 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.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### Non-GHS Hazards

Not available

#### 2.3 Other Hazards

Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2 Mixture

Name	Product identifier	% (w/w)	GHS-AU Classification
Tetrasodium EDTA	(CAS No) 64-02-8	10 - 30	Comb. Dust, H232 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Sodium silicate	(CAS No) 1344-09-8	1 - 5	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335
Sodium hydroxide	(CAS No) 1310-73-2	1 - 5	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Other Non-Hazardous Ingredients	NA	Up to 100	NA

Full text of H-phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

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.

Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

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.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Personal Protection in First Aid and Measures: Use appropriate personal protection equipment (PPE).

#### 4.2 Most Important Symptoms and Effects Both Acute and Delayed

General: Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: Corrosive. Causes burns.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure.

#### 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: Use of heavy stream of water may spread fire.

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#### 5.2 Special Hazards Arising From the Substance or Mixture

Fire Hazard: Product is not flammable.  
Explosion Hazard: Product is not explosive.  
Reactivity: Contact with metals may evolve flammable hydrogen gas.

#### 5.3 Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.  
Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  
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>). Sodium oxides. Nitrogen oxides.  
HAZCHEM Emergency Action Code (Australia): 2R

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### 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. Do not allow product to spread into the environment.

##### For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

##### For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

#### 6.2 Environmental Precautions

Prevent entry to sewers and public waters.

#### 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: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Neutralize spill carefully with any weak acid and flush remainder with plenty of water. Collect spillage. Store away from other materials. Contact competent authorities after a spill.

#### 6.4 Reference to Other Sections

See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals.

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. Wash contaminated clothing before reuse.

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

Technical Measures: Comply with applicable regulations. In cold weather, this product may form layers and freeze. This does not damage the product. If freezing occurs, thaw and remix thoroughly before using. Frozen material may be thawed in a warm room. Avoid localized overheating and vent drums while heating.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store in original container or corrosive resistant and/or lined container.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Reducing agents. Chlorine.

Storage Temperature: 46 °C (115 °F)

#### 7.3 Specific End Use(s)

Instrument Detergent. For professional use only.

### SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### 8.1 Control Parameters

##### Sodium hydroxide (1310-73-2)

USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
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#### 8.2 Exposure Controls

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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. Corrosion-proof clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing : Chemically resistant materials and fabrics.  
Hand Protection : Wear chemically resistant protective gloves.  
Eye Protection : Chemical safety goggles. A full face shield is recommended.  
Skin and Body Protection : Wear suitable protective clothing. Wash contaminated clothing before reuse.  
Respiratory Protection : If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.  
Other Information : When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical and Chemical Properties

Physical State : Liquid  
Appearance : Clear, light yellow  
Odor : Bland  
Odor Threshold : Not available  
pH : 10.7 - 11.3 (1% Solution)  
Relative Evaporation Rate (butylacetate=1) : Not available  
Melting Point : Not available  
Freezing Point : Not available  
Boiling Point : Not available  
Flash Point : Not available  
Auto-ignition Temperature : Not available  
Decomposition Temperature : Not available  
Flammability (solid, gas) : Not available  
Lower Flammable Limit : Not available  
Upper Flammable Limit : Not available  
Vapor Pressure : Not available  
Relative Vapor Density at 20 °C : Not available  
Specific Gravity : 1.13g/ml  
Solubility : Soluble in water  
Partition coefficient: n-octanol/water : Not available  
Viscosity : Not available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity:

Contact with metals may evolve flammable hydrogen gas.

### 10.2 Chemical Stability:

Stable under recommended handling and storage conditions (see section 7).

### 10.3 Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

### 10.4 Conditions to Avoid:

Direct sunlight. Extremely high or low temperatures.

### 10.5 Incompatible Materials:

Strong acids. Strong bases. Strong oxidizers. Reducing agents. Chlorine. Metals. May be corrosive to metals).

### 10.6 Hazardous Decomposition Products:

Thermal decomposition generates corrosive vapors. Carbon oxides (CO, CO<sub>2</sub>). Sodium oxides. Nitrogen oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological Effects - Product

Acute Toxicity: Not classified  
LD50 and LC50 Data: Not available  
Skin Corrosion/Irritation: Not classified [pH: 10.7 - 11.3 (1% Solution)]  
Serious Eye Damage/Irritation: Not classified [pH: 10.7 - 11.3 (1% Solution)]  
Respiratory or Skin Sensitization: Not classified

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Germ Cell Mutagenicity: Not classified  
Carcinogenicity: Not classified  
Specific Target Organ Toxicity (Repeated Exposure): Not classified  
Reproductive Toxicity: Not classified  
Specific Target Organ Toxicity (Single Exposure): Not classified  
Aspiration Hazard: Not classified  
Symptoms/Injuries After Inhalation: Inhalation may cause immediate severe irritation progressing quickly to chemical burns.  
Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.  
Symptoms/Injuries After Eye Contact: Corrosive. Causes burns.  
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.  
Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure.

### 11.2 Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium silicate (1344-09-8)	
LD50 Oral Rat	3400 mg/kg
Tetrasodium EDTA (64-02-8)	
LD50 Oral Rat	1780 mg/kg

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Ecology - General: Harmful to aquatic life with long lasting effects.

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
Sodium silicate (1344-09-8)	
LC50 Fish 1	301 - 478 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
LC 50 Fish 2	3185 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])
Tetrasodium EDTA (64-02-8)	
LC50 Fish 1	486 (Exposure time: 96h - Species: Lepomis macrochirus )
EC50 Daphnia 1	625 mg/l (Exposure time: 24 h - Species: Daphnia magna)
ErC50 (algae)	3 mg/l (exposure time: 96 h - Species: Green Algae)

### 12.2 Persistence and Degradability

Not established. May cause long-term adverse effects in the environment.

### 12.3 Bioaccumulative Potential

Sodium silicate (1344-09-8)	
BCF fish 1	(no bioaccumulation expected)
Tetrasodium EDTA (64-02-8)	
Log Pow	5.01 (calculated)
Sodium chloride (7647-14-5)	
BCF fish 1	(no bioaccumulation)

### 12.4 Mobility in Soil

Not available

### 12.5 Other Adverse Effects

Other Information: Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

According to UNRTDG and ADG Code: Non-hazardous

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 - Non-hazardous

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#### 14.4. Packing group

Not applicable

#### 14.5. Environmental hazards

Dangerous for the environment : No  
Marine pollutant : No  
Other information : No supplementary information available

#### 14.6. Special precautions for user

##### 14.6.1. Overland transport

Non-hazardous

##### 14.6.2. Transport by sea

Non-hazardous

##### 14.6.3. Air transport

Non-hazardous

##### 14.6.4. Inland waterway transport

Non-hazardous

#### 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 National Regulations

#### Sodium hydroxide (1310-73-2)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

#### Sodium silicate (1344-09-8)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

#### Tetrasodium EDTA (64-02-8)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on NZIoC (New Zealand Inventory of Chemicals)

### 15.2 International Agreements

No additional Information available

### 15.3 Australia National Regulations

#### Sodium hydroxide (1310-73-2)

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Appendix E, Appendix F - Safety Statements, Appendix F - Warning Statements, Schedule 5, Schedule 6

High Volume Industrial Chemicals List

Present

### 15.4 Australia Territory Regulations

No additional Information available

NZ - HSNO Approval Number HSR002526

Cleaning Products (Corrosive) Group Standard 2006

## SECTION 16: OTHER INFORMATION

Revision Date : 10/18/2019

Other Information : In accordance with The Model Work Health and Safety Regulations, and the Globally Harmonized System of Classification and Labelling of Chemicals 3<sup>rd</sup> Revised Edition.

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 Australia GHS