

Issuing Date No data available

Revision Date 08-Nov-2018

Revision Number 2

Japan / English

**1. PRODUCT AND COMPANY IDENTIFICATION****Product identifier**

Product Name ReciClean

Product Code(s) 109004

(M)SDS Number 1344192\_J

**Other means of identification**

Synonyms No information available

Registration Number(s) No information available

**Recommended use of the chemical and restrictions on use**

Recommended Use Laboratory Use Only

Uses advised against No information available

**Details of the supplier of the safety data sheet**

Manufacturer Buehler

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Asia Pacific: +1 760 476 3960

Middle East/Africa: +1 760 476 3959

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**2. HAZARDS IDENTIFICATION****GHS Classification**

Corrosive to metals	Category 1
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Reproductive toxicity	Category 2
Acute aquatic toxicity	Category 3
Chronic aquatic toxicity	Category 3

**Label elements****Signal word****Danger****Hazard statements**

H290 - May be corrosive to metals  
 H314 - Causes severe skin burns and eye damage  
 H361 - Suspected of damaging fertility or the unborn child  
 H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Avoid release to the environment  
 Keep only in original container

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor  
 Specific treatment (see supplemental first aid instructions on this label)  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor  
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Immediately call a POISON CENTER or doctor  
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting  
 Absorb spillage to prevent material damage

**Precautionary Statements - Storage**

Store locked up  
 Store in corrosion resistant container with a resistant inner liner

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other hazards**

Not applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

Chemical name	Weight-%	ENCS - Japan Existing and New Chemical	ISHL No.	CAS-No

		Substances		
Water	60 - 80%	No information available	No information available	7732-18-5
Methyldiethanolamine	15 - 20%	(2)-300	Present	105-59-9
Ethylene glycol bis(semiformal)	0 - 10%	No information available	No information available	3586-55-8
Disodium dodecylphenyl ether disulfonate	0 - 5%	(3)-1968,(9)-1958	Present	28519-02-0
Potassium hydroxide	0 - 1%	(1)-369	Present	1310-58-3

**Pollutant Release and Transfer Registry (PRTR)**

Not applicable.

**Industrial Safety and Health Law**

Not applicable

Chemical name	ISHL Notifiable Substances	Threshold Values (%)
Potassium hydroxide 1310-58-3	ISHL Notifiable Substances	1

**Poisonous and Deleterious Substances Control Law** Not applicable

Chemical name	Poisonous and Deleterious Substances	Threshold Values (%)
Potassium hydroxide 1310-58-3	Deleterious	>5 100

## 4. FIRST AID MEASURES

**First aid measures****General advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Inhalation**

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical advice/attention.

**Eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.

**Skin contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.

**Ingestion**

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.

**Symptoms**

Burning sensation.

**Self-protection of the first aider**

Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

**Note to physicians**

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood

pressure may occur with moist rales, frothy sputum, and high pulse pressure.

## 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated.
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	No information available.
<b>Specific hazards arising from the chemical</b>	The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.
<b>Special Extinguishing Media</b>	Cool drums with water spray.
<b>Special protective equipment for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
<b>Other Information</b>	Refer to protective measures listed in Sections 7 and 8.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.
<b>Reference to other sections</b>	See section 8 for more information. See section 13 for more information.

## 7. HANDLING AND STORAGE

### Handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.
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### Storage

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.
<b>Incompatible materials</b>	Oxidizing agent. Acids. Bases.

**General hygiene considerations** Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	Japan	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH TLV
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	-	Ceiling: 2 mg/m <sup>3</sup>

**Biological occupational exposure limits** Not applicable

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Personal protective equipment**

**Eye/face protection** Face protection shield.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Environmental exposure controls** No information available.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and Chemical Properties**

**Physical state** Liquid  
**Appearance** Colorless  
**Odor** Characteristic  
**Color** No information available  
**Odor Threshold** No information available

Property	Values	Remarks Method
pH	12.3	
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	No data available	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known

Relative density	1.054	
Water Solubility	Soluble in water	
Solubility(ies)	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Viscosity	No data available	None known
Explosive properties	No information available	
Oxidizing properties	No information available	

**Other Information**

Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk Density	No information available
Particle Size	No information available
Particle Size Distribution	No information available

## 10. STABILITY AND REACTIVITY

Reactivity	No information available.
Stability	Stable under normal conditions.
Explosion Data	
Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Exposure to air or moisture over prolonged periods.
Incompatible materials	Oxidizing agent. Acids. Bases.
Hazardous Decomposition Products	None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity****Product Information**

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Corrosive by inhalation. (based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes burns. (based on components). Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Corrosive. (based on components). Causes burns.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

**Symptoms** Redness. Burning. May cause blindness. Coughing and/ or wheezing.

#### Numerical measures of toxicity - Product Information

##### **Unknown acute toxicity**

- 6 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 6 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 21 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Numerical measures of toxicity - Component Information

Chemical name	LD50 Oral	LD50 Dermal	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )		
Methyldiethanolamine 105-59-9	= 1900 mg/kg ( Rat ) = 1945 mg/kg ( Rat )	= 5990 mg/kg ( Rabbit )	> 6.5 mg/m <sup>3</sup> ( Rat ) 6 h
Potassium hydroxide 1310-58-3	= 284 mg/kg ( Rat )		

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes burns.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Risk of serious damage to eyes. Causes burns.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	Contains a known or suspected reproductive toxin. Classification based on data available for ingredients.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target Organ Effects</b>	Respiratory system. Eyes. Skin. Gastrointestinal tract (GI).
<b>Aspiration hazard</b>	No information available.

## 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

**Percentage for unknown hazards** 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

**Ecotoxicity** Harmful to aquatic life with long lasting effects. .

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyldiethanolamine	72h EC50: = 37 mg/L (Desmodesmus subspicatus) 96h EC50: = 20 mg/L (Desmodesmus subspicatus)	96h LC50: > 1000 mg/L (Pimephales promelas) 96h LC50: 1000 - 2200 mg/L (Leuciscus idus)	EC50 = 410 mg/L 17 h	48h EC50: = 230 mg/L
Potassium hydroxide		96h LC50: = 80 mg/L (Gambusia affinis)	-	

**Persistence and Degradability** No information available.

**Bioaccumulation**

#### Component Information

Chemical name	Log Pow
Methyldiethanolamine	-1.08
Potassium hydroxide	0.65
	0.83

**Mobility in soil** No information available.

**Mobility** No information available.

**Other adverse effects** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. TRANSPORT INFORMATION

#### IMDG

UN Number UN1760  
 Proper Shipping Name CORROSIVE LIQUID, N.O.S.  
 Hazard Class (select) 8  
 Packing Group (select) III  
 EmS-No. F-A, S-B  
 Description UN1760, CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXIDE), 8, III

#### ADR

UN-No. UN1760  
 Proper Shipping Name CORROSIVE LIQUID, N.O.S.  
 Description UN1760, CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXIDE), 8, III, (E)  
 Hazard Class 8  
 Packing Group III  
 Special Provisions 274



Classification code C9  
Tunnel restriction code (E)

**IATA**

UN Number UN1760  
Proper Shipping Name CORROSIVE LIQUID, N.O.S.  
Hazard Class (select) 8  
Packing Group (select) III  
Description UN1760, CORROSIVE LIQUID, N.O.S. (POTASSIUM HYDROXIDE), 8, III

**Japan**

UN Number UN1760  
Proper Shipping Name Corrosive liquid, n.o.s.  
Hazard Class 8  
Packing group III  
Special Provisions 223, 274

**15. REGULATORY INFORMATION****Safety, health and environmental regulations/legislation specific for the substance or mixture****National Regulations****Japan****Pollutant Release and Transfer Registry (PRTR)**

Not applicable

**Industrial Safety and Health Law** Not applicable**Fire Service Law:**

Not applicable

**Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL)**

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed

**Chemical Weapons Prohibition Act**

Chemical Weapons Prohibition Act Enforcement Order Appendix 1 table item 3, column 4 class 2 designated precursor chemicals

**International Regulations****Ozone-depleting substances (ODS)** Not applicable**Persistent Organic Pollutants** Not applicable**Export Notification requirements** Not applicable**International Inventories**

**TSCA** Contact supplier for inventory compliance status.  
**DSL/NDL** Contact supplier for inventory compliance status.  
**EINECS/ELINCS** Contact supplier for inventory compliance status.  
**ENCS** Contact supplier for inventory compliance status.  
**KECL** Contact supplier for inventory compliance status.  
**PICCS** Contact supplier for inventory compliance status.  
**AICS** Contact supplier for inventory compliance status.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

## 16. OTHER INFORMATION

**Prepared By** Product Stewardship  
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 1-800-572-6501

**Issuing Date** 01-Mar-2017

**Revision Date** 08-Nov-2018

**Revision Note** No information available

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	-	Skin designation
C	Carcinogen		

#### Disclaimer

This SDS complies with the requirements of JIS Z 7250:2010 and JIS Z 7252:2009 (Japan). The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



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**End of Safety Data Sheet**