



## Safety Data Sheet

Material Name: E-Kleen SR 102-E

SDS ID: EPI-0212c

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**

E-Kleen SR 102-E

**Product Use**

Cleaner.

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

Electrochemical Products Inc.

17000 West Lincoln Ave

New Berlin, WI 53151

Phone: 262-786-9330

Emergency Phone #: NCEC (#EPI-29003) +1 202 464 2554, +44 1865 407333

E-mail: us-sales@epi.com

www.epi.com

Fax: 262-786-9403

### Section 2 - HAZARDS IDENTIFICATION

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Skin Corrosion/Irritation - Category 1

Serious Eye Damage/Eye Irritation - Category 1

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

Causes severe skin burns and eye damage.

**Precautionary Statement(s)**

**Prevention**

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Do not breathe dusts or mists.

**Response**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.



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Immediately call a POISON CENTER or doctor.

Specific treatment (see label).

### Storage

Store locked up.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	60-80
1310-73-2	Sodium hydroxide	10-30
527-07-1	Sodium gluconate	1-5
61791-14-8	Ethoxylated coconut oil alkyl amine	0.1-1.0
68084-34-4	Ethanol, 2,2',2''-nitrilotris-, compound with .alpha.-butyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate	1-5

The above percentage ranges are in compliance with the Canadian Workplace Hazardous Information System (WHMIS). Trade secret components.

### Section 4 - FIRST AID MEASURES

#### Inhalation

If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. Call a physician if symptoms develop or persist.

#### Skin

For skin contact flush with large amounts of water while removing contaminated clothing. If irritation develops or persists, seek medical attention. If skin still feels slippery, caustic maybe still present in large enough quantities to cause rash burn. Continue to wash the affective area until it does not feel slippery.

#### Eyes

Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Seek medical attention at once.

#### Ingestion

Do not induce vomiting unless directed to do so by medical personnel. If conscious, drink large quantities of water or acidic beverages like tomato or orange juice or carbonated soft drinks. If vomiting does occur administer additional water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention or advice.

#### Most Important Symptoms/Effects

##### Acute

Causes severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system.

### Section 5 - FIRE FIGHTING MEASURES



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### Extinguishing Media

#### Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

#### Unsuitable Extinguishing Media

None known.

### Special Hazards Arising from the Chemical

None identified.

### Hazardous Combustion Products

None.

### Fire Fighting Measures

Firefighters should wear full protective clothing including self contained breathing apparatus.

## Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Isolate area. Keep unnecessary personnel away. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.

### Methods and Materials for Containment and Cleaning Up

Contain the discharged material. Stop source of leak if possible. Block any potential routes to water systems.

Ventilate the contaminated area. Absorb spilled product with a commercial oil absorbent, such as sand or earth.

Shovel absorbed material into appropriate container for disposal. Wear appropriate protective equipment and clothing during clean-up. Avoid skin contact and inhalation of vapors during disposal of spills. Isolate area. Keep unnecessary personnel away. Follow all Local, State, Federal and Provincial regulations for disposal. Surfaces may become slippery after spillage. Neutralize with dilute acid. Flush spill area with water followed by liberal coverage of sodium bicarbonate.

### Environmental Precautions

Do not allow the spilled product to enter public drainage system or open water courses.

## Section 7 - HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid getting this material into contact with your skin and eyes. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

### Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

Keep container tightly closed in a cool, well-ventilated place.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

<b>Sodium hydroxide</b>	<b>1310-73-2</b>
ACGIH:	2 mg/m <sup>3</sup> Ceiling
NIOSH:	2 mg/m <sup>3</sup> Ceiling
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	10 mg/m <sup>3</sup> IDLH
OSHA (US):	2 mg/m <sup>3</sup> TWA
Mexico:	2 mg/m <sup>3</sup> Ceiling

### ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

### Engineering Controls

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear chemical goggles; face shield (if splashing is possible).

#### Skin Protection

Use of protective coveralls and long sleeves is recommended to prevent skin contact. Use of an impervious apron is recommended.

#### Respiratory Protection

If ventilation is not sufficient to effectively prevent buildup of vapor/mist/fume/dust, appropriate NIOSH/MSHA respiratory protection must be provided.

#### Glove Recommendations

Use chemical resistant impervious gloves.

#### Protective Materials

Eye wash fountain and emergency showers are recommended.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Slightly Amber viscous solution	<b>Physical State</b>	Liquid
<b>Odor</b>	Odorless	<b>Color</b>	Amber.
<b>Odor Threshold</b>	Not available	<b>pH</b>	13 - 14
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	>230 °F (110 °C)
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	45 - 50 °F (7.22-10 °C)
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available



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<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	1.22 - 1.3
<b>Water Solubility</b>	Completely	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	Not available
<b>VOC</b>	0	<b>Molecular Weight</b>	Not available

### Section 10 - STABILITY AND REACTIVITY

#### Reactivity

Contact with some metals, particularly magnesium, aluminum, zinc (galvanized) can rapidly generate hydrogen which can be explosive.

#### Chemical Stability

Stable under normal conditions.

#### Possibility of Hazardous Reactions

Will not occur.

#### Conditions to Avoid

Avoid contact with extreme heat. Avoid contact with acids.

#### Incompatible Materials

This product may react with strong acids.

#### Hazardous decomposition products

Carbon monoxide and carbon dioxide.

#### Thermal decomposition products

Upon thermal decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### Section 11 - TOXICOLOGICAL INFORMATION

#### Acute and Chronic Toxicity

##### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

##### Water (7732-18-5)

Oral LD50 Rat >90 mL/kg

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

Oral LD50 Rat 140 - 340 mg/kg

Dermal LD50 Rabbit 1350 mg/kg

##### Ethoxylated coconut oil alkyl amine (61791-14-8)

Oral LD50 Rat 750 mg/kg

#### Product Toxicity Data

##### Acute Toxicity Estimate

No data available.

##### Immediate Effects



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No information on significant adverse effects.

**Delayed Effects**

No information on significant adverse effects.

**Irritation/Corrosivity Data**

No data available.

**Respiratory Sensitization**

No data available.

**Dermal Sensitization**

No data available.

**Component Carcinogenicity**

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

**Germ Cell Mutagenicity**

No data available.

**Tumorigenic Data**

No data available

**Reproductive Toxicity**

No data available.

**Specific Target Organ Toxicity - Single Exposure**

No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

No data available.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

**Section 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity**

Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

**Component Analysis - Aquatic Toxicity**

<b>Sodium hydroxide</b>	<b>1310-73-2</b>
Fish:	LC50 96 h Oncorhynchus mykiss 45.4 mg/L [static ]

**Section 13 - DISPOSAL CONSIDERATIONS**

**Disposal Methods**

As shipped, this product would be considered a D002 (corrosive) waste. The U.S. EPA has not published waste numbers for this product's components. Waste must be handled in accordance with all federal, state, provincial, and local regulations. In case of large spills, follow all facility Emergency Response Procedures. Do not allow this material to into sewers/water supplies. Do not reuse container. Dispose of container and any unused contents in accordance with Federal, State, Provincial and Local Waste Regulations.

**Component Waste Numbers**

The U.S. EPA has not published waste numbers for this product's components.



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### Section 14 - TRANSPORT INFORMATION

#### US DOT Information:

**Shipping Name:** SODIUM HYDROXIDE SOLUTION

**Hazard Class:** 8

**UN/NA #:** UN1824

**Packing Group:** II

**Required Label(s):** Corrosive

#### TDG Information:

**Shipping Name:** SODIUM HYDROXIDE SOLUTION

**Hazard Class:** 8

**UN#:** UN1824

**Packing Group:** II

**Required Label(s):** Corrosive

#### International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

<b>Sodium hydroxide</b>	<b>1310-73-2</b>
IBC Code:	Category Y (solution )

### Section 15 - REGULATORY INFORMATION

#### U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

<b>Sodium hydroxide</b>	<b>1310-73-2</b>
CERCLA:	1000 lb final RQ ; 454 kg final RQ

#### SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

Skin Corrosion/Irritation; Serious Eye Damage/Eye Irritation

#### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
<b>Sodium hydroxide</b>	<b>1310-73-2</b>	Yes	Yes	Yes	Yes	Yes

#### California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

Not listed under California Proposition 65.

#### Canada Regulations

This material is a controlled product under Canadian WHMIS regulations.

#### Canadian WHMIS Ingredient Disclosure List (IDL)



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Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

<b>Sodium hydroxide</b>	<b>1310-73-2</b>
	1 %

**Component Analysis - Inventory  
Water (7732-18-5)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes

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

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

**Sodium gluconate (527-07-1)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

**Ethoxylated coconut oil alkyl amine (61791-14-8)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI -	KR KECI -	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
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							Annex 1	Annex 2						
Yes	DSL	No	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes

**Ethanol, 2,2',2''-nitrilotris-, compound with .alpha.-butyl-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate (68084-34-4)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes	No

**Section 16 - OTHER INFORMATION**

**HMIS Rating**

Health: 3 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

**NFPA Ratings**

Health: 3 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada);



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NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

### **Other Information**

#### **Disclaimer:**

Reasonable care has been taken in the preparation of this information; however, the manufacturer makes no warranty whatsoever including the warranty of merchantability, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental, consequential, or other such damages resulting from its use or misuse..