



Safety Data Sheet

Material Name: E-Kleen SR 163

SDS ID: EPI-0389c

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

E-Kleen SR 163

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

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Section 2 - HAZARDS IDENTIFICATION

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

Acute Toxicity - Dermal - Category 4

Hazardous to the Aquatic Environment - Chronic - Category 3

GHS Label Elements

Symbol(s)



Signal Word

Warning

Hazard Statement(s)

Harmful in contact with skin

Harmful to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

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

Avoid release to the environment

Response



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IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
Call a POISON CENTER or doctor if you feel unwell
Specific treatment (see label)

Storage

None needed according to classification criteria

Disposal

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

Statement of Unknown Toxicity

0% of the mixture consists of ingredient(s) of unknown acute toxicity.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	75-80
7320-34-5	Potassium pyrophosphate	10-15
111-76-2	2-Butoxyethanol	3-5
111-42-2	Diethanolamine	1-2
61791-14-8	Ethoxylated coconut oil alkyl amine	0.5-0.8
72283-31-9	Poly(oxy-1,2-ethanediyl), .alpha.-phenyl-.omega.-hydroxy-, phosphate, potassium salt	0.3-0.5
1643-20-5	1-Dodecanamine, N,N-dimethyl-, N-oxide	0.2-0.5

Section 4 - FIRST AID MEASURES

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin

Immediately flush skin with lots of running water for 5 minutes. Remove contaminated clothing and shoes. Wash before reuse. Get immediate medical attention.



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Eyes

Immediately flush with lots of running water for 15 minutes, lifting the upper and lower eye lids occasionally. Washing eyes within several seconds is essential to achieve maximum effectiveness. Get immediate medical attention.

Ingestion

Do not induce vomiting. Give large quantities of water or milk. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide, water fog.

Unsuitable Extinguishing Media

None identified.

Special Hazards Arising from the Chemical

None identified.

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. Wear appropriate protective equipment and clothing during clean-up.

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.

Environmental Precautions

Comply with regulations for spill reporting.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling



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Wash thoroughly after handling. Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings on container, as if they were full.

Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria

Keep in a closed container away from incompatible materials.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

2-Butoxyethanol	111-76-2
ACGIH:	20 ppm TWA
NIOSH:	5 ppm TWA; 24 mg/m ³ TWA
	Potential for dermal absorption
	700 ppm IDLH
Europe:	20 ppm TWA; 98 mg/m ³ TWA
	Possibility of significant uptake through the skin
	50 ppm STEL; 246 mg/m ³ STEL
OSHA (US):	50 ppm TWA; 240 mg/m ³ TWA
	prevent or reduce skin absorption
Mexico:	26 ppm TWA LMPE-PPT; 120 mg/m ³ TWA LMPE-PPT
	75 ppm STEL [LMPE-CT]; 360 mg/m ³ STEL [LMPE-CT]
	Skin - potential for cutaneous absorption
Diethanolamine	111-42-2
ACGIH:	1 mg/m ³ TWA inhalable fraction and vapor
	Skin - potential significant contribution to overall exposure by the cutaneous route
NIOSH:	3 ppm TWA; 15 mg/m ³ TWA

Biological limit value

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.



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Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses or chemical goggles. It is generally recognized that contact lenses should not be worn when working with chemicals because they may contribute to the severity of an eye injury.

Skin Protection

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

Respiratory Protection

Use a NIOSH approved HEPA filter, or supplied air respirators when exposures reach the OSHA established PELs.

Glove Recommendations

Use impervious gloves.

Protective Materials

Eye wash fountain and emergency showers are recommended.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow liquid	Physical State	Liquid
Odor	Pungent	Color	Not available
Odor Threshold	Not available	pH	9 - 11
Melting Point	Not available	Boiling Point	232 °F (111 °C)
Freezing point	32 °F (0 °C)	Evaporation Rate	Not available
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	>200
Lower Explosive Limit	Not available	Decomposition	Not available
Upper Explosive Limit	Not available	Vapor Pressure	Not available
Vapor Density (air=1)	Not available	Specific Gravity (water=1)	1.1223 - 1.1423
Water Solubility	Complete	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available		

Section 10 - STABILITY AND REACTIVITY



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Reactivity

Will not occur.

Chemical Stability

This is a stable material.

Possibility of Hazardous Reactions

Will not occur.

Conditions to Avoid

None identified.

Incompatible Materials

Strong acids.

Hazardous decomposition products

No data available.

Thermal decomposition products

None identified.

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

Potassium pyrophosphate (7320-34-5)

Oral LD50 Mouse 2000 mg/kg

2-Butoxyethanol (111-76-2)

Oral LD50 Rat 470 mg/kg

Dermal LD50 Rabbit 99 mg/kg

Inhalation LC50 Rat 450 ppm 4 h

Coconut diethanolamide (68603-42-9)

Oral LD50 Rat 12400 µL/kg

Diethanolamine (111-42-2)

Oral LD50 Rat 0.62 mL/kg

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

Oral LD50 Rat 750 mg/kg

Immediate Effects

No information on significant adverse effects.

Delayed Effects

No information on significant adverse effects.



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Irritation/Corrosivity Data

No data available.

Respiratory Sensitization

No data available.

Dermal Sensitization

No data available.

Component Carcinogenicity

2-Butoxyethanol	111-76-2
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 88 [2006] (Group 3 (not classifiable))
DFG:	Category 4 (no significant contribution to human cancer)
Coconut diethanolamide	68603-42-9
IARC:	Monograph 101 [2013] (Group 2B (possibly carcinogenic to humans))
OSHA:	Present
Diethanolamine	111-42-2
ACGIH:	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
IARC:	Monograph 101 [2013]; Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))
DFG:	Category 3B (could be carcinogenic for man)
OSHA:	Present

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



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No data available.

Medical Conditions Aggravated by Exposure

No data available.

Section 12 - ECOLOGICAL INFORMATION

Component Analysis - Aquatic Toxicity

Potassium pyrophosphate	7320-34-5
Fish:	LC50 96 h Oncorhynchus mykiss >100 mg/L
Invertebrate:	EC50 48 h water flea >100 mg/L
2-Butoxyethanol	111-76-2
Fish:	LC50 96 h Lepomis macrochirus 1490 mg/L [static]; LC50 96 h Lepomis macrochirus 2950 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L EPA
Coconut diethanolamide	68603-42-9
Fish:	LC50 96 h Brachydanio rerio 3.6 mg/L [semi-static]
Diethanolamine	111-42-2
Fish:	LC50 96 h Pimephales promelas 4460 - 4980 mg/L [flow-through]; LC50 96 h Pimephales promelas 1200 - 1580 mg/L [static]; LC50 96 h Lepomis macrochirus 600 - 1000 mg/L [static]
Algae:	EC50 72 h Desmodesmus subspicatus 7.8 mg/L IUCLID; EC50 96 h Pseudokirchneriella subcapitata 2.1 - 2.3 mg/L IUCLID
Invertebrate:	EC50 48 h Daphnia magna 55 mg/L IUCLID

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

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 enter sewers/water supplies. Do not reuse container. Dispose of container and any unused contents in accordance with Federal, State, Provincial and Local Waste Regulations.



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Section 14 - TRANSPORT INFORMATION

US DOT Information:

No Classification assigned.

TDG Information:

No Classification assigned.

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.

Diethanolamine	111-42-2
SARA 313:	1 % de minimis concentration
CERCLA:	100 lb final RQ; 45.4 kg final RQ

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
2-Butoxyethanol	111-76-2	Yes	Yes	Yes	Yes	Yes
Diethanolamine	111-42-2	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer

Coconut diethanolamide	68603-42-9
Carc:	carcinogen , 6/22/2012
Diethanolamine	111-42-2
Carc:	carcinogen , 6/22/2012

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

2-Butoxyethanol	111-76-2
	1 %
Diethanolamine	111-42-2
	1 %

Component Analysis - Inventory

Water (7732-18-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Potassium pyrophosphate (7320-34-5)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No

2-Butoxyethanol (111-76-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Coconut diethanolamide (68603-42-9)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

Diethanolamine (111-42-2)

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes



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

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR - KECI/KECL	KR - TCCA	CN	NZ	MX
Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 1 Fire: 0 Reactivity: 0

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

NFPA Ratings

Health: 1 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; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; 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; EEC - European Economic Community; 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; 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; JP - Japan; Kow - Octanol/water partition coefficient; KECI - Korea Existing Chemicals Inventory; KECL - Korea Existing Chemicals List; KR - Korea; 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; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; 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; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act.; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.



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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..