



Safety Data Sheet

Material Name: E-Kleen 120

SDS ID: EPI-0066c

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

E-Kleen 120

Product Use

Alkaline 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.

Acute Toxicity - Oral - Category 4

Acute Toxicity - Dermal - Category 4

Skin Corrosion/Irritation - Category 1

Serious Eye Damage/Eye Irritation - Category 1

Carcinogenicity - Category 2

Hazardous to the Aquatic Environment - Acute - Category 3

Hazardous to the Aquatic Environment - Chronic - Category 3

GHS Label Elements

Symbol(s)



Signal Word

Danger

Hazard Statement(s)



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Harmful if swallowed.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
Suspected of causing cancer.
Harmful to aquatic life with long lasting effects.

Precautionary Statement(s)

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.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
Do not breathe dusts or mists.

Response

IF exposed or concerned: Get medical advice/attention.
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.
Take off contaminated clothing and wash before reuse.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.

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
1310-73-2	SODIUM HYDROXIDE	50-80
6834-92-0	Sodium metasilicate	15-25



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497-19-8	Disodium carbonate	5-10
7722-88-5	Tetrasodium pyrophosphate	5-10
18662-53-8	Nitrilotriacetic acid, trisodium salt monohydrate	1-5
NA	Surfactants	3-5

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

Immediately flush skin with lots of running water for 30 minutes. Remove contaminated clothing and shoes. Wash before reuse. Get immediate 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

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 person who is unconscious or is having convulsions. Call a physician immediately.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Water spray, dry chemical, carbon dioxide.

Unsuitable Extinguishing Media

None identified.

Special Hazards Arising from the Chemical

None identified.

Hazardous Combustion Products

None known.



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Fire Fighting Measures

Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. Firefighters should avoid inhaling any combustion products.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Isolate area. Keep unnecessary personnel away. Wear appropriate protective equipment during cleanup.

Methods and Materials for Containment and Cleaning Up

Avoid the generation of dusts during clean-up. Scoop up gross quantities of spilled material. Sweep up remaining material and dispose of contaminated material.

Environmental Precautions

If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with product. (DO NOT USE SAWDUST). Neutralize the spilled material before disposal. Avoid inhalation of dust from the spilled material. Avoid contact with skin and eyes. Neutralize with dilute acid. Flush spill area with water followed by liberal coverage of sodium bicarbonate.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling

Avoid getting this material into contact with your skin and eyes.

Conditions for Safe Storage, Including any Incompatibilities

Store locked up.

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

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Sodium Hydroxide	1310-73-2
ACGIH:	2 mg/m3 Ceiling
NIOSH:	2 mg/m3 Ceiling
	10 mg/m3 IDLH
OSHA (US):	2 mg/m3 TWA
Mexico:	2 mg/m3 Ceiling



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Tetrasodium pyrophosphate	7722-88-5
NIOSH:	5 mg/m3 TWA

EU - Occupational Exposure (98/24/EC) - Binding Biological Limit Values and Health Surveillance Measures

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

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 and face shield.

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 of impervious gloves is recommended.

Protective Materials

Eye wash fountain and emergency showers are recommended.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to Light Tan Powder	Physical State	Powder
Odor	Not available	Color	Light Tan Powder
Odor Threshold	Not available	pH	Not available
Melting Point	Not available	Boiling Point	Not available
Freezing point	Not available	Evaporation Rate	Not available
Boiling Point Range	Not available	Flammability (solid, gas)	Not available
Autoignition	Not available	Flash Point	Not available



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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)	Not available
Water Solubility	Completely	Partition coefficient: n-octanol/water	Not available
Viscosity	Not available	Solubility (Other)	Not available
Density	Not available	VOC	0

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.

Incompatible Materials

This product may react with strong acids.

Hazardous decomposition products

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



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

Sodium Hydroxide (1310-73-2)

Dermal LD50 Rabbit 1350 mg/kg

Sodium metasilicate (6834-92-0)

Oral LD50 Rat 1153 mg/kg

Disodium carbonate (497-19-8)

Oral LD50 Rat 4090 mg/kg

Dermal LD50 Mouse 2210 mg/kg

Inhalation LC50 Rat 2300 mg/m³ 2 h

Tetrasodium pyrophosphate (7722-88-5)

Oral LD50 Rat 1000 - 3000 mg/kg

Nitrilotriacetic acid, trisodium salt monohydrate (18662-53-8)

Oral LD50 Rat 1100 mg/kg (related to Nitrilotriacetic acid trisodium salt)

Inhalation LC50 Rat >5 mg/L 4 h (no deaths occurred) (related to Nitrilotriacetic acid trisodium salt)

Immediate Effects

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

Nitrilotriacetic acid, trisodium salt monohydrate	18662-53-8
IARC:	Monograph 73 [1999]; Monograph 48 [1990] (evaluated as a group) (Group 2B (possibly carcinogenic to humans))
OSHA:	Present

Germ Cell Mutagenicity

No data available.

Tumorigenic Data

No data available

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity - Single Exposure



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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

Sodium Hydroxide	1310-73-2
Fish:	LC50 96 h Oncorhynchus mykiss 45.4 mg/L [static]
Sodium metasilicate	6834-92-0
Fish:	LC50 96 h Brachydanio rerio 210 mg/L [semi-static]; LC50 96 h Brachydanio rerio 210 mg/L
Disodium carbonate	497-19-8
Fish:	LC50 96 h Lepomis macrochirus 300 mg/L [static]; LC50 96 h Pimephales promelas 310 - 1220 mg/L [static]
Invertebrate:	EC50 48 h Daphnia magna 265 mg/L IUCLID
Nitrilotriacetic acid, trisodium salt monohydrate	18662-53-8
Fish:	LC50 96 h Pimephales promelas 93 - 170 mg/L [flow-through]; LC50 96 h Lepomis macrochirus 175 - 225 mg/L [static]; LC50 96 h Lepomis macrochirus 252 mg/L; LC50 96 h Pimephales promelas 470 mg/L [static]; LC50 96 h Oryzias latipes 560 - 1000 mg/L; LC50 96 h Oryzias latipes 560 - 1000 mg/L [semi-static]; LC50 96 h Oncorhynchus mykiss 72 - 133 mg/L [static]; LC50 96 h Poecilia reticulata 560 - 1000 mg/L [semi-static]; LC50 96 h Poecilia reticulata 560 - 1000 mg/L; LC50 96 h Pimephales promelas 114 mg/L (related to Nitrilotriacetic acid trisodium salt)



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Invertebrate:	LC50 48 h Daphnia magna 560 - 1000 mg/L IUCLID (related to Nitrilotriacetic acid trisodium salt)
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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 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.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name: Sodium hydroxide, solid

Hazard Class: 8

UN/NA #: UN1823

Packing Group: II

Required Label(s): Corrosive

TDG Information:

Shipping Name: Sodium hydroxide, solid

Hazard Class: 8

UN#: UN1823

Packing Group: II

Required Label(s): Corrosive

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.

Sodium Hydroxide	1310-73-2
CERCLA:	1000 lb final RQ; 454 kg final RQ



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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
Sodium Hydroxide	1310-73-2	Yes	Yes	Yes	Yes	Yes
Tetrasodium pyrophosphate	7722-88-5	Yes	Yes	Yes	Yes	Yes
Nitritotriacetic acid, trisodium salt monohydrate	18662-53-8	No	Yes	No	No	No

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

Nitritotriacetic acid, trisodium salt monohydrate	18662-53-8
Carc:	carcinogen , 4/1/1989

Canada Regulations

This material is a controlled product under Canadian WHMIS regulations.

Canadian WHMIS Ingredient Disclosure List (IDL)

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

Sodium Hydroxide	1310-73-2
	1 %
Sodium metasilicate	6834-92-0
	1 %
Disodium carbonate	497-19-8
	1 %
Tetrasodium pyrophosphate	7722-88-5
	1 %

Component Analysis - Inventory

Sodium Hydroxide (1310-73-2)

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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Sodium metasilicate (6834-92-0)

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

Disodium carbonate (497-19-8)

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

Tetrasodium pyrophosphate (7722-88-5)

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

Nitrilotriacetic acid, trisodium salt monohydrate (18662-53-8)

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

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 3 Fire: 0 Reactivity: 1

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

NFPA Ratings

Health: 3 Fire: 0 Reactivity: 1

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



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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.

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..