

SDS ID: EPI-0456c

Material Name: E-Brite Ultra Alk P

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name E-Brite Ultra Alk P Product Use Plating Additive.

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



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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 Immediately call a POISON CENTER or doctor Specific treatment (see label)

Storage

Store locked up May cause mild eye or skin irritation.

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 | 90-98 |
| 1310-73-2 | Sodium hydroxide | 0.1-0.2 |

Section 4 - FIRST AID MEASURES

Inhalation

If inhaled, immediately remove the affected person to fresh air.

Skin

Wash skin with soap and water.

Eyes

Flush immediately with water for at least 15 minutes. Do not rub eyes. If irritation persists, get medical attention.

Ingestion



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If swallowed, give milk or water to dilute. Seek medical attention immediately. Never give anything by mouth to an unconscious person. Call a physician immediately.

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.

Hazardous Combustion Products None identified.

Advice for firefighters None identified.

Fire Fighting Measures Use methods suitable to fight surrounding fire.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures Wear protective gloves and eye/face protection.

Methods and Materials for Containment and Cleaning Up None identified.

Environmental Precautions

Dike and contain the spill with sand and earth.

Section 7 - HANDLING AND STORAGE

Conditions for Safe Storage, Including any Incompatibilities Store locked up

Store locked up

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits



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| 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 |

Biological limit value

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

Engineering Controls

Local exhaust is suggested for use, where possible, in enclosed or confined spaces.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection

Safety glasses. 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

Wear rubber gloves, long sleeved shirt and trousers.

Respiratory Protection

Not normally needed.

Glove Recommendations

Wear rubber gloves.

| Appearance | Clear solution | Physical State | Liquid |
|------------------------|----------------|---------------------------|-----------------------------|
| Odor | Characteristic | Color | Colorless |
| Odor Threshold | Not available | рН | 11 - 13 |
| Melting Point | Not available | Boiling Point | 212 °F |
| Freezing point | 32 °F (0 °C) | Evaporation Rate | (Approx. equal to Water) |
| Boiling Point Range | Not available | Flammability (solid, gas) | Not available |
| Autoignition | Not available | Flash Point | Not available |

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES



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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) | - Specific Gravi | | 1 - 1.02 |
| 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

No known hazardous reactions.

Chemical Stability This is a stable material.

Possibility of Hazardous Reactions

None identified. Hazardous polymerization will not occur.

Conditions to Avoid

None identified.

Incompatible Materials None identified.

None identified.

Hazardous decomposition products None identified.

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:



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Water (7732-18-5) Oral LD50 Rat >90 mL/kg Sodium hydroxide (1310-73-2) Dermal LD50 Rabbit 1350 mg/kg

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 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

Component Analysis - Aquatic Toxicity

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



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Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

Shipping Name:Sodium Hydroxide Solution Hazard Class: 8 UN/NA #: 1824 Packing Group: II Required Label(s): Corrosive

TDG Information:

Shipping Name:Sodium Hydroxide Solution Hazard Class: 8 UN#: 1824 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 |

All components are on the U.S. EPA TSCA Inventory List. Supplier(s) of proprietary component(s) have stated that their components appear on the Canadian DSL/NDSL.

SARA Section 311/312 (40 CFR 370 Subparts B and C) Acute Health: no Chronic Health: no Fire: no Pressure: no Reactivity: no

U.S. State Regulations

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



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| Component | CAS | CA | MA | MN | NJ | PA |
|------------------|-----------|-----|-----|-----|-----|-----|
| Sodium hydroxide | 1310-73-2 | Yes | Yes | Yes | Yes | Yes |

Not listed under California Proposition 65

Canada Regulations

This product is not WHMIS controlled.

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 % |

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 |

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 |

Section 16 - OTHER INFORMATION

HMIS Rating

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

NFPA Ratings

Health: 2 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



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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 LIstsTM - 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..