Material Name
E-Brite Ultra Cu pH

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.
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

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>80-90</td>
</tr>
<tr>
<td>584-08-7</td>
<td>Carbonic acid, dipotassium salt</td>
<td>15-25</td>
</tr>
</tbody>
</table>

### Section 4 - FIRST AID MEASURES

**Inhalation**
Immediately move victim to fresh air. If symptoms persist, seek medical attention.

**Skin**
Wash skin with soap and water. If irritation persists get medical attention.

**Eyes**
Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

**Ingestion**
If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Give several glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions.

### Section 5 - FIRE FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media**
Use methods for the surrounding fire.

**Unsuitable Extinguishing Media**
None identified.

**Special Hazards Arising from the Chemical**
None identified.

**Hazardous Combustion Products**
Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

**Advice for firefighters**
Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

**Fire Fighting Measures**
Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Use methods for the surrounding fire.

### Section 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**
Safety Data Sheet

Material Name: E-Brite Ultra Cu pH A

Wear appropriate personal protective equipment.

Methods and Materials for Containment and Cleaning Up
Isolate area. Keep unnecessary personnel away.

Environmental Precautions
Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Wash thoroughly after handling. Do not reuse the empty container.

Conditions for Safe Storage, Including any Incompatibilities
Store locked up.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)
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
Wear chemical goggles; face shield (if splashing is possible).

Skin Protection
Use impervious gloves. Use of protective coveralls and long sleeves is recommended. 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 impervious gloves.

Protective Materials
Eye wash fountain and emergency showers are recommended.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Odor</th>
<th>Odor Threshold</th>
<th>Melting Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Solution</td>
<td>Odorless</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical State</td>
<td>Color</td>
<td>pH</td>
<td>Boiling Point</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.8 - 12.4</td>
<td>218 °F (103 °C)</td>
</tr>
<tr>
<td>Liquid</td>
<td>Clear.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section 10 - STABILITY AND REACTIVITY

**Reactivity**
Will not occur.

**Chemical Stability**
This is a stable material.

**Possibility of Hazardous Reactions**
None.

**Conditions to Avoid**
None.

**Incompatible Materials**
This product may react with strong acids or oxidizing agents.

**Hazardous decomposition products**
Upon 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:
Material Name: E-Brite Ultra Cu pHA  

Water (7732-18-5)  
Oral LD50 Rat >90 mL/kg  

Carbonic acid, dipotassium salt (584-08-7)  
Oral LD50 Rat 1870 mg/kg  

**Product Toxicity Data**  
**Acute Toxicity Estimate**  

| Oral | > 2000 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.  

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**Section 12 - ECOLOGICAL INFORMATION**  

**Component Analysis - Aquatic Toxicity**  
No LOLI ecotoxicity data are available for this product's components.  

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**Section 13 - DISPOSAL CONSIDERATIONS**  

**Disposal Methods**  
Dispose of waste material in accordance with all applicable Federal, State or provincial and local environmental regulations. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.  

**Component Waste Numbers**  
The U.S. EPA has not published waste numbers for this product's components.
Section 14 - TRANSPORT INFORMATION

US DOT Information:
No Classification assigned.

International Bulk Chemical Code
This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations
None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

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
None of this product’s components are listed on the state lists from CA, MA, MN, NJ or PA.

Not listed under California Proposition 65

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.

<table>
<thead>
<tr>
<th>Component Analysis - Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water (7732-18-5)</td>
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</table>

<table>
<thead>
<tr>
<th>Carbonic acid, dipotassium salt</th>
<th>584-08-7</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1 %</td>
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</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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</tr>
<tr>
<td>Carbonic acid, dipotassium salt (584-08-7)</td>
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</tbody>
</table>
Material Name: E-Brite Ultra Cu pH₄

Safety Data Sheet

Section 16 - OTHER INFORMATION

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

**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; 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); 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.