Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name
E-Brite 180-B

Product Use
Plating Additive. Acid. Tin.

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.
Serious Eye Damage/Eye Irritation - Category 2B
Skin Sensitization - Category 1B

GHS Label Elements

Symbol(s)

Signal Word
Warning

Hazard Statement(s)
Causes eye irritation.
May cause an allergic skin reaction.

Precautionary Statement(s)
Prevention
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves.

Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Safety Data Sheet

Wash contaminated clothing before reuse.
Specific treatment (see label).

Storage
None needed according to classification criteria.
May cause mild eye or skin irritation.

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

Other Hazards
This product may cause irritation to the eyes. This product may cause irritation to the skin. Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

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>75-80</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Aromatic Aldehyde</td>
<td>2-5</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Nonylphenol ethoxylates</td>
<td>6-8</td>
</tr>
</tbody>
</table>

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

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media
Suitable Extinguishing Media
Dry chemical, foam, carbon dioxide, water fog.

Unsuitable Extinguishing Media
None identified.

Specific hazards arising from the chemical
The product itself does not burn. Irritating or toxic fumes may be released upon heating or during combustion.

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

Special Protective Equipment and Precautions for Firefighters
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
Wear protective gloves and eye/face protection.

Methods and Materials for Containment and Cleaning Up
None identified.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Avoid contact with eyes, skin and clothing. Avoid breathing vapors or dust. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation. Keep out of the reach of children.

Conditions for Safe Storage, Including any Incompatibilities
None needed according to classification criteria.
Keep the container tightly closed and in a cool, well-ventilated place.

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.

Appropriate 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.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear solution</td>
</tr>
<tr>
<td>Odor</td>
<td>Faint, pungent.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point Range</td>
<td>Not available</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to light yellow.</td>
</tr>
<tr>
<td>pH</td>
<td>5 - 9</td>
</tr>
<tr>
<td>Freezing point</td>
<td>32 °F (0 °C)</td>
</tr>
</tbody>
</table>
Evaporation Rate | (Approx. equal to Water) | Flammability (solid, gas) | Not available
Autoignition Temperature | Not available | Flash Point | Not available
Lower Explosive Limit | Not available | Decomposition temperature | Not available
Upper Explosive Limit | Not available | Vapor Pressure | Not available
Vapor Density (air=1) | (Approx. equal to water) | Specific Gravity (water=1) | 1.01 - 1.04
Water Solubility | Completely | Partition coefficient: n-octanol/water | Not available
Viscosity | Not available | Solubility (Other) | Not available
Density | Not available | VOC | 0
Molecular Weight | Not available |

Section 10 - STABILITY AND REACTIVITY

Reactivity
No known hazardous reactions.

Chemical Stability
This is a stable material.

Possibility of Hazardous Reactions
Hazardous polymerization will not occur.

Conditions to Avoid
Avoid direct sunlight and heat sources.

Incompatible Materials
This product may react with strong alkalies. This product may react with strong acids.

Hazardous decomposition products
Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Sulfur oxides. Carbon monoxide. Carbon dioxide.

Thermal decomposition products
Hazardous combustion products may include carbon monoxide, carbon dioxide and hydrocarbon fragments.

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:
Safety Data Sheet

Material Name: E-Brite 180-B  SDS ID: EPI-0280c

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

Nonylphenol ethoxylates (Trade Secret)
Oral LD50 Rat 2590 mg/kg
Dermal LD50 Rabbit 1780 µL/kg

Product Toxicity Data
Acute Toxicity Estimate
No data available.

Immediate Effects
No information on significant adverse effects.

Delayed Effects
No information on significant adverse effects.

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

Section 12 - ECOLOGICAL INFORMATION

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

Section 13 - DISPOSAL CONSIDERATIONS

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

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.

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.

<table>
<thead>
<tr>
<th>Nonylphenol ethoxylates</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA 12b:</td>
<td>Section 5, 1 % de minimus concentration</td>
</tr>
</tbody>
</table>

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.

Not listed under California Proposition 65

Component Analysis - Inventory
Water (7732-18-5)
## Safety Data Sheet

### Material Name: E-Brite 180-B  
### SDS ID: EPI-0280c

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</tr>
</thead>
<tbody>
<tr>
<td>Aromatic Aldehyde (Trade Secret)</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>Yes</td>
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### Section 16 - OTHER INFORMATION

**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.