



## Safety Data Sheet

Material Name: E-Brite 181

SDS ID: EPI-0278c

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**

E-Brite 181

**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.**

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Warning.

**Hazard Statement(s)**

Causes skin irritation.

Causes serious eye irritation.

**Precautionary Statement(s)**

**Prevention**

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

Wash thoroughly after handling.

**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 occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Specific treatment (see label).

**Storage**



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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. May be harmful if inhaled.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
7732-18-5	Water	75-85
111-76-2	2-Butoxyethanol	15-20
Trade Secret	Nonylphenol ethoxylates	3-4

## 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

None identified.

#### Hazardous Combustion Products

None identified.

## 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



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None identified.

## Section 7 - HANDLING AND STORAGE

### Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

<b>2-Butoxyethanol</b>	<b>111-76-2</b>
ACGIH:	20 ppm TWA
NIOSH:	5 ppm TWA ; 24 mg/m3 TWA
	Potential for dermal absorption
	700 ppm IDLH
Europe:	20 ppm TWA ; 98 mg/m3 TWA
	Possibility of significant uptake through the skin
	50 ppm STEL ; 246 mg/m3 STEL
OSHA (US):	50 ppm TWA ; 240 mg/m3 TWA
	prevent or reduce skin absorption
Mexico:	26 ppm TWA LMPE-PPT ; 120 mg/m3 TWA LMPE-PPT
	75 ppm STEL [LMPE-CT ] ; 360 mg/m3 STEL [LMPE-CT ]
	Skin - potential for cutaneous absorption

### ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

#### 2-Butoxyethanol (111-76-2)

200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis

#### 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



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Wear rubber gloves.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear solution	<b>Physical State</b>	Liquid
<b>Odor</b>	Odorless.	<b>Color</b>	Colorless to light yellow.
<b>Odor Threshold</b>	Not available	<b>pH</b>	3 - 8.5
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	212 °F
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	32 °F (0 °C)
<b>Evaporation Rate</b>	(Approx. equal to Water)	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	(Approx. equal to water)	<b>Specific Gravity (water=1)</b>	99-1.02
<b>Water Solubility</b>	Completely	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Solubility (Other)</b>	Not available
<b>Density</b>	Not available	<b>VOC</b>	0
<b>Molecular Weight</b>	Not available		

### 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

Avoid direct sunlight and heat sources.

#### Incompatible Materials

None identified.



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### 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:

#### Water (7732-18-5)

Oral LD50 Rat >90 mL/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

#### Nonylphenol ethoxylates (Trade Secret)

Oral LD50 Rat 2590 mg/kg

Dermal LD50 Rabbit 1780 µL/kg

### Product Toxicity Data

#### Acute Toxicity Estimate

Dermal	0 mg/kg
Oral	> 2000 mg/kg

### Immediate Effects

No information on significant adverse effects.

### Delayed Effects

No information on significant adverse effects.

### 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 )

## Section 12 - ECOLOGICAL INFORMATION

### Component Analysis - Aquatic Toxicity

2-Butoxyethanol	111-76-2
Fish:	LC50 96 h Lepomis macrochirus 1490 mg/L [static ]; LC50 96 h Lepomis macrochirus 2950 mg/L



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Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L EPA
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**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.

Nonylphenol ethoxylates	Trade Secret
TSCA 12b:	Section 5 , 1 % de minimus concentration

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)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes

**2-Butoxyethanol (111-76-2)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW
Yes	DSL	EIN	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

**Nonylphenol ethoxylates (Trade Secret)**



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Yes	DSL	No	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes

### 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..