



Safety Data Sheet

Material Name: E-Brite Ultra Cu RTP

SDS ID: EPI-0011c

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name

E-Brite Ultra Cu RTP

Product Use

Copper Plating.

Manufacturer Information

Electrochemical Products Inc.
17000 West Lincoln Ave
New Berlin, WI 53151
Phone: 262-786-9330
Emergency Phone #: Chemtrec #800-424-9300 (CCN7498)
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 Sensitization - Category 1A

Specific Target Organ Toxicity - Repeated Exposure - Category 1 (Hematopoietic System, kidneys, respiratory system)

Specific Target Organ Toxicity - Repeated Exposure - Category 2 (liver, stomach)

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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May cause allergic skin reaction
Causes damage to organs through prolonged or repeated exposure
May cause damage to organs through prolonged or repeated exposure
Harmful to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

Do not breathe dust/fume/gas/mist/vapours/spray
Wash thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace
Do not eat, drink or smoke when using this product
Avoid release to the environment
Wear protective gloves

Response

IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
Get medical advice/attention if you feel unwell
Specific treatment (see label)

Storage

None needed according to classification criteria

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. This product may cause irritation to the respiratory system. Harmful if swallowed.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Component Name | Percent |
|--------------|---------------------|---------|
| 7732-18-5 | Water | 55-60 |
| Trade Secret | Copper (+2) Complex | 1-3 |

Section 4 - FIRST AID MEASURES

Description of Necessary Measures



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If the material is swallowed, get immediate medical attention or advice. Do NOT induce vomiting. Give several glasses of water to dilute contents of stomach and call a physician. Never give anything by mouth to a victim who is unconscious or is having convulsions.

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 person who is unconscious or is having convulsions.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use methods suitable for the surrounding fire.

Unsuitable Extinguishing Media

None known.

Hazardous Combustion Products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Decomposition of this product may yield metallic oxides.

Fire Fighting Measures

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

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Isolate area. Keep unnecessary personnel away.

Methods and Materials for Containment and Cleaning Up

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.

Environmental Precautions

Do not discharge into sewers or waterways.



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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

None needed according to classification criteria

Keep container tightly closed and in a well ventilated place.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

ACGIH, NIOSH, EU, OSHA (US) and Mexico have not developed exposure limits for any of this product's components

Biological limit value

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

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|------------------------------|---------------|----------------------------------|--------------------------|
| Appearance | Blue Solution | Physical State | Liquid |
| Odor | Mild-Musty | Color | Blue |
| Odor Threshold | Not available | pH | 9.2 - 10 |
| Melting Point | Not available | Boiling Point | 218 °F (103 °C) |
| 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 |
| Lower Explosive Limit | Not available | Decomposition | Not available |
| Upper Explosive Limit | Not available | Vapor Pressure | Not available |



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| | | | |
|------------------------------|--------------------------|---|---------------|
| Vapor Density (air=1) | (Approx. equal to water) | Specific Gravity (water=1) | 1.11 - 1.13 |
| 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

Will not occur.

Chemical Stability

This is a stable material.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

This product may react with strong acids or oxidizing agents.

Incompatible Materials

This product may react with strong acids. This product may react with oxidizing agents.

Hazardous decomposition products

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

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

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

Water (7732-18-5)

Oral LD50Rat >90 mL/kg



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Copper (+2) Complex (Trade Secret)

Oral LD50Rat 960 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.

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

| | |
|---------------------|---|
| Copper (+2) Complex | Trade Secret |
| Fish: | LC50 96 h Lepomis macrochirus 0.66 - 1.15 mg/L [semi-static]; LC50 96 h Lepomis macrochirus 0.96 - 1.8 mg/L [static]; LC50 96 h Oncorhynchus mykiss 0.1478 - 0.165 mg/L [flow-through]; LC50 96 h Oncorhynchus mykiss 0.09 - 0.19 mg/L [static]; LC50 96 h Pimephales promelas 0.6752 mg/L [static] |



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| | |
|---------------|---|
| Invertebrate: | EC50 48 h Daphnia magna 0.147 - 0.227 mg/L [static] EPA |
|---------------|---|

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations.

Section 14 - TRANSPORT INFORMATION

US DOT Information:

No Classification assigned.

TDG Information:

No Classification assigned.

Section 15 - REGULATORY INFORMATION

U.S. Federal Regulations

None of this products 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)

Acute Health: no Chronic Health: no Fire: no Pressure: no Reactivity: no

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.

Component Analysis - Inventory

Water (7732-18-5)

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



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Copper (+2) Complex (Trade Secret)

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

Section 16 - OTHER INFORMATION

HMIS Rating

Health: 1 Fire: 0 Reactivity: 0

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

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 Community; EINECS - European Inventory of Existing Commercial Chemical Substances; 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; JP - Japan; Kow - Octanol/water partition coefficient; 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; 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; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.