

Safety Data Sheet**115-3821/115-3824**

CircuitMedic, 22 Parkridge Road, Haverhill, MA 01835 USA
 Phone: 978-373-1600 | Website: <http://www.circuitmedic.com>
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Section 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Plating Solution, Gold
Product Numbers: 1 oz: 115-3821, 4 oz: 115-3824
Distributor: CircuitMedic
 22 Parkridge Road, Haverhill, MA 01835 USA
 PHONE: 978-373-1600, FAX: 978-372-5700
Emergency Response: For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident
 Call CHEMTREC Day or Night
 Within USA and Canada: 1-800-424-9300 CCN4877
 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

**Section 2. HAZARD IDENTIFICATION**

Although some of the active components in this solution are toxic, they are present at very low concentrations. If symptoms of exposure are experienced as result of using this product, call 911 or the Emergency Response number listed above.

Classifications: Classification according to Regulation(EC)No1272/2008
 Classifications applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200)

Emergency Overview:**Potential Health Effects:**

Inhalation: Weakness, dizziness, headache, vomiting, unconscious and death.
Eyes: Contact with the eyes may cause severe irritation and eye damage.
Skin: "Cyanide Rash" - itching, macular, papular and vesicular eruptions. There are often secondary infections.
Ingestion: May cause death or permanent injury from small quantities. (If detected early: vomiting or unconsciousness).

Section 3. COMPOSITION, INFORMATION OR INGREDIENTS

Information relating to the hazardous constituents in this product are detailed below. The remainder of this solution consists of weak organic acid buffers, inorganic salts and water that are not considered to be hazardous.

The broad category of cyanide compounds that are included in this product are classified as "CERCLA Hazardous Substances"; however, there is no specific reportable quantity for this material.

Chemical Name	C.A.S. Number	Weight %	OSHA PEL	ACGIH STEL	ACGIH TWA
Potassium Aurocyanide	13967-50-5	1-5%	10 mg/M3 (CN)	5 mg/M3 (CN)	-
Cobalt Carbonate	513-79-1	0.1-1%	-	-	0.2 mg/m3 (Co)

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Section 4. FIRST AID MEASURES

- Inhalation:** Treat 5 times at 15 second intervals with amyl nitrite broken in cloth. Artificial respiration if necessary. Call a physician.
- Eye Contact:** Flush eyes with water for 15 minutes or longer. Call a physician.
- Skin Contact:** Wash thoroughly with soap and water. Call a physician.
- Ingestion:** If conscious, give emetic (1 tablespoon salt to a glass of warm water). Repeat until vomit fluid is clear. Call a physician.

Section 5. FIRE-FIGHTING MEASURES

- Flammable Properties:** Material will not burn.
- Fire Fighting Instructions:** Full protective gear with a NIOSH/MSHA approved, self-contained breathing apparatus and protective gear if fully involved in a fire.
- Hazardous Combustion Products:** N/A
- Extinguishing Media:** Use media appropriate for the surrounding fire. Do not use a carbon dioxide extinguisher.

Section 6. ACCIDENTAL RELEASE MEASURES

- Land Spill:** Evacuate area. Do not inhale mist from solution. Avoid contact with skin, eyes and clothing. Absorb with inert material, carefully sweep up and place in a suitable container for shipment to a refinery. Flush spill area with a dilute solution of sodium or calcium hypochlorite.
- Neutralizing Agent:** Dilute solution of sodium or calcium hypochlorite.
- Environmental Precautions:** Do not allow product to enter drains or watercourses.

Section 7. HANDLING AND STORAGE

- Storage Temperature:** 55 - 85 degrees F
- Storage Pressure:** Atmospheric
- General:** Store in a cool, dry place away from strong acids and food products.
- Shelf Life:** 2 years minimum.

Section 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering Controls:** Mechanical ventilation is recommended if product is aerosolized.
- Personal Protection:** In accordance with good industrial hygiene, wash hands with soap and water after working with material.
- Respiratory Protection:** Generally not required unless solution is aerosolized.
- Hand Protection:** Protective Gloves Recommended (Rubber).
- Eye Protection:** Use one of the following: Safety Glasses or Chemical Goggles.
- Other Recommended:** Use rubber apron to minimize exposure.

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Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Density:	1.056g/cm ³
pH:	N/A
Boiling Point:	N/A
Freezing Point:	N/A
Vapor Density (Air = 1):	N/A
% Volatile By Weight:	N/A
% Solids:	N/A
Evaporation Rate (Butyl Acetate = 1):	N/A
Solubility in Water:	Very soluble
Viscosity:	N/A
Molecular Weight:	N/A
Physical State:	Liquid
Molecular Weight:	N/A
Appearance:	Purple solution
Vapor Pressure(mmHg):	N/A

Section 10. STABILITY AND REACTIVITY

General:	Stable
Incompatible materials and Conditions to Avoid:	Do not mix with strong acids, acid fumes or steam.
Hazardous Decomposition or Byproducts:	Hydrogen cyanide.
Hazardous Polymerization:	Will not occur.

Section 11. TOXICOLOGICAL INFORMATION

Results of Component Toxicity Test Performed:	Information not available.
Human Experience:	Information not available.

Section 12. ECOLOGICAL INFORMATION

Further Information: Information not available.

Section 13. DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 Classification: Federal, State, and Local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

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Section 14. TRANSPORT INFORMATION

Although individual components of this product are toxic in their pure form, the concentrations of these components present in the shipped material are below thresholds that would require classifying this product as a hazardous material shipment under US DOT and UN transport regulations.

Basic Description: Non-hazardous shipment. This product is not subject to the requirements of US DOT Hazardous Materials Regulations or UN regulations on the Transport of Dangerous Goods.

Proper Shipping Name: N/A

Hazard Class: N/A

Packaging Group: N/A

UN Number: N/A

Label Requirements: N/A

Maximum Shippable Qty.: N/A

Packaging: N/A

Reportable Quantity (RQ): N/A

NAERG Guide# (2000): N/A

Limitations: N/A

Section 15. REGULATORY INFORMATION**United States Federal Regulations:**

U.S. SARA Reporting Requirements: Section 302 - None of the components are Section 302 Extremely Hazardous Substances. Section 313 - This product contains the following chemicals (at levels of 1% or greater which are found on the 313 list of Toxic Chemicals):
 * potassium aurocyanide, CAS #: 13967-50-5
 * cobalt complex, CAS #: 14931-83-0

U.S. SARA Threshold Planning Quantity: N/A

U.S. CERCLA Reportable Quantity (RQ): The broad category of cyanide compounds that are included in this product are classified as "CERCLA Hazardous Substances"; however, there is no specific RQ (reportable quantity) threshold for this material.

U.S. TSCA Inventory Information: All substances are TSCA listed.

U.S. State Regulatory Information: This product is subject to state worker and Community Right-to-Know Acts.

California Safe Drinking Water and Toxic Enforcement Act (proposition 65): This product contains the following ingredients which appear on California Proposition 65 list:
 *nickel complex. CAS# 34831-03-3 (~ 0.2%)

International Regulations:

Canada Whims: Non-hazardous.

Europe EINECS Numbers: N/A

Canadian Substance Inventory: One or more of the components of this product do not appear in the Canadian Substance Inventory.

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Section 16. OTHER INFORMATION**Label Information:**

European risk and Safety Phrases: N/A

European Symbols Needed: N/A

Canadian WHIMS Symbols: N/A

NFPA Hazard Rating: (1) Flammability (1) Health (0) Reactivity

Abbreviations Used in this Document: NE - Not Established, NA - Not Applicable/Not Available, NIF - No Information Found

References:

Code of Federal Regulations (CFR)
The Sigma-Aldrich Library of Regulatory and Safety Data
Chemical Guide and OSHA Hazard Communication Standard
Various Federal, State & Local Regulations

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