

MATERIAL SAFETY DATA SHEET

TRADE NAME (AS LABELED): 24K Gold Plating Solution (hard acid gold)
COMMON OR CHEMICAL NAME: POTASSIUM METALLIC CYANIDE MIXTURE

SUPPLIERS NAME & ADDRESS:

Gold Plating Services, Inc.
 67 E. 200 N.
 Kaysville, Utah 84037
 24 hour emergency: **1-800-515-3131**

SECTION I - HAZARDOUS INGREDIENTS

INGREDIENTS	PERCENT	ADOPTED VALUES
Potassium Aurocyanide CAS554-07-4 KAu (CN) ₂	>1.00%	TLV = 5mg/m ³ ACGIH
Cobalt Complex CAS 7440-48-4 Cobalt as Co(2+)	>0.08%	0.05mg CO +2/m ³ ACGIH
Nickel Complex CAS 7440-02-0 Nickel as Ni (2+)	>0.01%	0.05mg Ni +2/m ³ ACGIH

(Note: The remainder of this solution consists of weak organic acid buffers, inorganic salts and water that are not considered to be hazardous. This material is regulated as a toxic chemical, Section 313 of Title III/SARA, and CFR, Part 372. In compliance with California Proposition 65 Regulation, notice is given that this product contains materials that can cause cancer. All ingredients are listed in the TSCA inventory.)

SECTION II - HEALTH HAZARDS

Threshold limit value: As indicated in section I.

Primary Routes of Entry: Eye/skin contact. Inhalation, ingestion

EFFECTS OF OVEREXPOSURE:

INHALATION: Weakness, dizziness, headache, vomiting, unconsciousness and death.

CONTACT WITH SKIN OR EYES: "Cyanide Rash" - itching, macular, papular and vesicular eruption
 There are often secondary infections.

ABSORBED THROUGH SKIN: Same as inhalation and Eye and Skin contact.

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SECTION II - HEALTH HAZARDS -- CONTINUED --

SWALLOWED: May cause death or permanent injury from small quantities. (If detected early; vomiting or unconsciousness.)

HEALTH EFFECTS OR RISK FROM EXPOSURE: Explain in lay terms.

ACUTE: Local: Irritant that causes readily reversible changes which disappear after end of exposure. Systemic: Ingestion or inhalation may cause death or permanent injury after very short exposure to small quantities.

CHRONIC: Local: Irritant that may cause both reversible and irreversible changes but not severe enough to cause death or permanent injury. Systemic: Ingestion or inhalation can cause readily reversible changes which disappear after end of exposure.

FIRST AID PROCEDURES: IT IS ADVISABLE TO KEEP A CYANIDE ANTIDOTE KIT ON HAND IN THE WORK AREA AT ALL TIMES FOR USE BY TRAINED PARAMEDICS, IN CASE OF INGESTION OR INHALATION< DIAL 911 OR YOUR LOCAL EMERGENCY MEDICAL RESPONSE TEAM.

EYES: Flush eyes with water for 15 minutes or longer. Call physician.

SKIN CONTACT: Wash thoroughly with soap and water. Call physician.

INHALED: Treat 5 times at 15 second intervals with amyl nitrate broken in cloth. Artificial respiration if necessary. Call physician.

SWALLOWED: If conscious, give emetic (1 tablespoon salt to a glass of warm water). Repeat until vomit fluid is clear. Call physician.

SUPPLEMENTAL HEALTH INFORMATION: This product is a suspected cancer agent.

SECTION III - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Optional. (NIOSH/MSHA approved respirator)

Ventilation Required: Use Local Exhaust.

Protective Clothing: Eye Protection: Safety glasses or goggles. Wear rubber gloves. Wear rubber apron

Other: Wash thoroughly before eating or smoking.

SECTION IV - FIRE & EXPLOSION HAZARD DATA

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Flash Point: N/A (does not burn).

Auto ignition Temperature, F° N.A.

Protective clothing: Eye Protection: Safety glasses or goggles. Wear rubber gloves. Wear rubber apron.

Other: Wash thoroughly before eating or smoking.

SECTION V - PHYSICAL DATA

Vapor Density (Air=1) : N.A. Specific Gravity: 11 geg. Baume (min)

Vapor Pressure: (mm Hg): N.A. Melting Point (deg F°) : N.A.

Evaporation Rule (butyl Acetate = 1) Boiling Point (deg F°) : N.D.

Solubility in Water: Very soluble

Appearance and Odor: Purpose solution; odorless

SECTION VI - REACTIVITY DATA

Stability: Stable

Incompatibility: Do not mix with strong acids, acid fumes or steam.

Hazardous Decomposition: Hydrogen cyanide.

Hazardous Polymerization: Will not occur.

SECTION VII - SPILL AND LEAD PROCEDURES

Steps to be taken if material released or spilled: Collect and send to Gold Plating Services for refining - contains gold. Treat as complexed cyanide. For employee protection, see Section VIII.

Waste Disposal: Should be in accordance with federal, State, and local environmental control regulations.

END OF REPORT