

24K Pure Gold Solution

Safety Data Sheet

According To Federal Register / Vol 77, No. 58 / Monday March 26, 2012 / Rules And Regulations

Revision Date January 15, 2022

Original Date December 16, 2015

SECTION 1. IDENTIFICATION

Product Name: 24 K Pure Gold Solution

Product Form: Mixture

Recommended use: Electroplating bath

Supplier:

Gold Plating Services

378 North Main #112

Layton, Utah 84041 USA

Telephone no: 801-546-6200

Emergency no: PERS 800-633-8253, Outside the USA and Canada 801-629-0667

Current SDS preparation date: January 15, 2022

Original SDS preparation date: December 16, 2015

SECTION 2. HAZARD IDENTIFICATION

Classification:

Acute Toxicity - Oral, Category 4

Skin Corrosion/Irritation, Category 1

Eye Damage/Irritation, Category 1

Acute Aquatic Toxicity, Category 3

Chronic Aquatic Toxicity, Category 3

Label elements and precautionary statements:

Signal word: Danger

Pictogram(s):



Hazards not otherwise classified: None

Hazard statement(s):

Harmful if swallowed

Causes severe skin burns and eye damage

Very toxic to aquatic life with long lasting effects

Precautionary statement(s):

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Do not breathe dust, fume, gas, mist, vapors or spray.

Wear protective gloves, clothing and eye and face protection.

If swallowed: Call a poison center or doctor/physician if you feel unwell.

Rinse mouth, do not swallow.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

24K Pure Gold Solution

Safety Data Sheet

According To Federal Register / Vol 77, No. 58 / Monday March 26, 2012 / Rules And Regulations

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If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Avoid release to the environment.
Wash contaminated clothing before reuse.

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical name	CAS Number	EINECS Number	Concentration
Potassium aurocyanide	13967-50-5	237-748-4	0.4%

The chemical identity and concentration of one or more ingredients of this product are withheld as a trade secret under the provisions of paragraph (i) of 29 CFR 1910.1200. This information will be made available to health professionals and others in accordance with the applicable provisions of this paragraph.

SECTION 4. FIRST AID MEASURES

Inhalation:

Have someone contact a physician or poison control center immediately. If conscious but symptoms (nausea, difficult breathing, dizziness, etc.) are evident, first responders may give oxygen. If consciousness is impaired or patient is unconscious, oxygen and amyl nitrite should be administered by trained qualified medical squads. Amyl nitrite is given by breaking an ampoule in a gauze pad and inserting into the lip of the oxygen resuscitator mask for 15 seconds, and then taking it away for 15 seconds. Repeat this 5 or 6 times. If necessary, use a fresh ampoule every 3 minutes until the patient regains consciousness (usually 1 - 4 ampoules). Administer oxygen continuously. Guard against the ampoule entering the patient's mouth. Move the patient to an uncontaminated area. Keep the patient warm and calm.

Skin contact:

Have someone contact a physician or poison control center immediately. Immediately flush with large quantities of water for up to 5 minutes after contact and completely remove all contaminated clothing including shoes and boots. Flushing with water for up to 5 minutes is generally sufficient to effectively remove cyanide from the patient's skin. Rescue workers should protect themselves against exposure.

Eye contact:

Have someone contact a physician or poison control center immediately. Immediately flush eyes with copious amounts of water for up to 5 minutes while holding the eyelids apart. Eye contact will require further evaluation and possibly treatment. Continue rinsing the eyes during transport to the hospital.

Ingestion:

Have someone call a physician or poison control center immediately. If conscious but symptoms (nausea, difficult breathing, dizziness, etc.) are evident, first responders may give oxygen. If consciousness is impaired, administer oxygen and amyl nitrite as directed under Inhalation section. Never give anything by mouth to an unconscious person. Do not induce vomiting as this could interfere with resuscitator use. If the patient is conscious, trained, qualified medical squads may give activated charcoal slurry. (50 grams of activated carbon slurried in 400 ml of water). Give 5 ml/1 kg. of wt. – about 350 ml for an average adult.

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SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use media appropriate for surrounding fire such as foam, extinguishing powder, carbon dioxide or water spray. In case of fire, cool endangered containers with water spray.

Unsuitable extinguishing media: High pressure water jet.

Specific hazards in case of fire: May release toxic hydrogen cyanide fumes upon heating to dryness.

Special protective equipment and precaution for fire fighters: For fires in enclosed areas, wear self-contained breathing apparatus and full protective gear. Do not inhale combustion gases.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear appropriate skin, eye and respiratory protection. Do not eat, drink or smoke while cleaning up. Ensure adequate ventilation.

Methods and materials for containment and cleaning up:

Wear appropriate personal protective gear including eye, skin and respiratory protection. Contain spilled material and collect by absorption or other suitable method. Flush spill area with water. Do not allow this material or its rinsings to enter storm or sanitary sewers or other waterways. (See also Section 13).

Environmental precautions:

Prevent spills and rinsings from entering storm or sanitary sewers or other waterways and contact with soil.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with eyes. Avoid prolonged repeated skin contact and breathing mists or vapors. Use in well-ventilated area. Do not empty waste into sanitary drains.

Conditions for safe storage, including incompatibilities:

Store in a cool, dry area. Use with adequate ventilation. Keep container tightly closed when not in use. Store only in the original container.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:

<u>Ingredient</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>Other Limits</u>
Potassium aurocyanide	5 mg/m ³ (CN) STEL-C	5 mg/m ³ (CN)	5 mg/m ³ (CN) NIOSH REL

Appropriate engineering controls:

24K Pure Gold Solution

Safety Data Sheet

According To Federal Register / Vol 77, No. 58 / Monday March 26, 2012 / Rules And Regulations

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Use in well-ventilated area with local exhaust.

Respiratory protection:

Wear appropriate, approved respirator when ventilation is inadequate to meet exposure limits.

Eye protection:

Chemical splash goggles or safety glasses with side shields must be worn.

Skin protection:

Wear rubber or neoprene gloves. Wear rubber apron and long sleeves to prevent skin contact. Wash hands thoroughly with soap and water after handling and before eating or smoking.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid

Color: Clear, colorless

Odor: Slight cyanide

Odor threshold: Not available

pH: 5.0 - 7.0

Melting/freezing point: Not determined

Initial boiling point: 100 °C (212 °F)

Flash point: Not applicable

Evaporation rate: Not available

Flammability (solid, gas): Not applicable

Upper/lower explosion limits: Non-explosive

Vapor pressure: Not determined

Vapor density: Not determined

Relative density (H₂O = 1) @25 °C: 1.10+/-0.05

Solubility: Completely soluble in water at 20 °C

Partition coefficient octanol/water: Not determined

Auto-ignition temperature: Not applicable

Decomposition temperature: Not available

Viscosity: Similar to water

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Stable, non-reactive when stored and used as recommended.

Chemical stability: No decomposition if used according to specifications.

Possibility of hazardous reactions: None are known.

Conditions to avoid: Avoid contact with incompatible materials.

Incompatible materials: Acids and oxidizers.

Hazardous decomposition products: May release toxic hydrogen cyanide fumes upon heating to dryness.

24K Pure Gold Solution

Safety Data Sheet

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SECTION 11. TOXICOLOGICAL INFORMATION

Routes of Exposure and Symptoms

Inhalation: May cause weakness, dizziness, headache, vomiting, unconsciousness and death.

Ingestion: Harmful if swallowed.

Skin Contact: Harmful if contact with skin. May cause severe irritation

Eye Contact: Causes severe irritation.

Acute and Chronic Effects from Short- and Long-term Exposure:

See Routes of Exposure and Symptoms above.

Acute Oral Toxicity: LD50: 2160 mg/kg

Dermal Toxicity: No applicable information available.

Acute Inhalation Toxicity: No applicable information available.

Acute Eye Irritation: Known to be an eye irritant.

Dermal Irritation: Known to be a skin irritant.

Carcinogen Listings:

IARC: No

NTP: No

OSHA: No

Reproductive Effects: No applicable information available.

Target Organ Effects: No applicable information available.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity: There are no data reported for this material; however, this product is harmful to aquatic life.

Persistence and degradability: There are no data reported for this material; however, this product is harmful to aquatic life.

Bio-accumulative potential: There is no evidence to suggest bioaccumulation will occur.

Mobility in soil: Accidental spillage may lead to penetration in the soil and groundwater. Improper handling and disposal of this material may cause environmental damage.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Disposal of this material is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

24K Pure Gold Solution

Safety Data Sheet

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SECTION 14. TRANSPORT INFORMATION

14.1. In Accordance with DOT	Not regulated for transport
14.2. In Accordance with IMDG	Not regulated for transport
14.3. In Accordance with IATA	Not regulated for transport
14.4. In Accordance with TDG	Not regulated for transport

SECTION 15. REGULATORY INFORMATION

Inventory Status:

All components are on TSCA, EINECS/ELINCS, AICS, and DSL.

U.S. Regulations:

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:

SARA (311/312) HAZARD CATEGORIES:

None Immediate Delayed Fire Reactive Pressure generating

SARA 313: This product contains the following SARA 313 Toxic Release Chemicals.

Chemical Name	CAS Number	Concentration
Potassium aurocyanide	13967-50-5	0.4%

The following product components are cited on the lists below:

Chemical Name	CAS Number	List Citations
None		California Proposition 65 List

SECTION 16. OTHER INFORMATION

VOC (Volatile Organic Compounds): None

HMIS Ratings:

Health: 3 **Flammability:** 0 **Reactivity:** 0 **Personal Protection:** C

Prepared by: Terry Darger

SDS Preparation date: December 16, 2015

Supersedes previous version: New SDS.

This SDS contains revisions in the following section(s): Not applicable. New SDS.

The information contained herein is accurate to the best of our knowledge. Gold Plating Services. makes no warranty of any kind, express or implied, concerning the safe use of this material in any process or in combination with other substances.

END OF SAFETY DATA SHEET