

SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name

7821A

Gold Plating Solution

Product No.

Chemical Family :
(Salt.)

Material Uses

Not available.

Supplier

Alisco Company

PO Box 6166, Warwick CV34 9PN

sales@alisco.co.uk Tel. 01926 359930

Section 2. Composition and Information on Ingredients

Preparation

Substance/Preparation

Composition/information on ingredients

Physical/Chemical Hazards

CAS Number % EC Number Symbol R-Phrases

*Gold Potassium Cyanide Salt

13967-50-5 1 200-821-6 N R32, R50/53

*Nickel sulphate

7786-81-4 2.5 232-104-9 Xn, N R22, R40, R42/43, R50/53

Occupational Exposure Limit(s), if available, are listed in Section 8

Section 3. Hazards Identification

Most Important Hazards

R32- Contact with acids liberates very toxic gas. R40- Possible risks of irreversible effects. R42/43- May cause sensitization by inhalation and skin contact. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other Toxic Effects on

Humans

Very hazardous in case of skin contact (sensitizer), of inhalation (lung sensitizer). Hazardous in case of ingestion. Very slightly hazardous in case of skin contact (irritant), of_eye_contact (irritant), of inhalation (lung irritant). Non-hazardous in case of inhalation. Non-corrosive for lungs.

Potential Chronic Health Effects

Very slightly hazardous in case of skin contact (sensitizer), of inhalation (lung sensitizer). Non-irritant for skin. Non-irritating to the eyes. Non-hazardous in case of ingestion. Non-irritant for lungs. **CARCINOGENIC EFFECTS:** Classified None. by OSHA [*Gold Potassium Cyanide Salt]. Classified 3(a) (Possible for humans.) by European Union [*Nickel sulphate]. **MUTAGENIC EFFECTS:** Classified None. for humans [*Gold Potassium Cyanide Salt]. Classified None. for humans [*Nickel sulphate]. **TERATOGENIC EFFECTS:** Classified None. for humans [*Gold Potassium Cyanide Salt]. Classified None. for humans [*Nickel sulphate]. **DEVELOPMENTAL TOXICITY:** Classified Reproductive system/toxin/female, Reproductive system/toxin/male [None.] [*Gold Potassium Cyanide Salt]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [None.] [*Nickel sulphate]. The substance is toxic to blood. Repeated or prolonged exposure to the substance can produce target organs damage.

Environmental Hazards

Not available.

Section 4. First Aid Measures**Eye Contact**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact

In case of contact, immediately flush skin copiously with water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention immediately.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention immediately.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Notes to Physician

If symptoms of cyanide poisoning are evident, administer amyl nitrate by inhalation for 15-30 seconds every minute. Immediately inject 10 ml of a 3% solution of sodium nitrate intravenously over a period of 1 to 4 minutes.

Section 5. Fire Fighting Measures**Fire-Fighting Media and Instructions**

Avoid breathing dusts, vapours or fumes from burning materials.

Special Exposure Hazards

Not available.

Special Fire Fighting Protective Equipment

Not applicable.

UK Hazchem

Not available.

Section 6. Environmental Precautions and Cleanup Methods

Environmental Precautions and Cleanup Methods

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above exposure limits. Check exposure limits on the MSDS and with local authorities.

Section 7. Handling and Storage

Handling

Do not breathe vapor or mist. Avoid prolonged or repeated contact with skin. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact of spilled material and runoff with soil and surface waterways.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value.

Protective Clothing

Hands

Gloves.

Eyes

Safety glasses.

Respiratory

Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Skin

Lab coat.

Exposure Limits

Ingredient Name

MEL/OES

*Gold Potassium Cyanide Salt

TWA: 5 STEL: 5 (mg/m3) [United Kingdom (UK)]

*Nickel sulphate

TWA: 0.1 (mg/m3) [United Kingdom (UK)]

Exposure Level

References and Methods

Not available.

Section 9. Physical and Chemical Properties**Physical State and Appearance**

Liquid

Odor

Almond-like.

Taste

Not available.

Color

Green. (Light.)

Bulk Density

Not available.

pH (1 % Soln/Water)

Basic.

Boiling Point

Not available.

Melting Point

Not available.

Vapor Pressure

Not available.

Vapor Density

Not available.

Volatility

Not available.

VOC

Not available.

Evaporation Rate

Not available.

Odor Threshold

Not available.

Viscosity

Not available.

LogKow

Not available.

Solubility

Partially soluble in cold water. Insoluble in methanol.

Oxidizing Properties

Not available.

Flash Points

Not applicable.

Auto-ignition Temperature

Not applicable.

Explosion Limits in air

Not applicable.

Explosibility

Not considered as a product presenting risks of explosion.

Flammability

Not applicable.

Dust Explosivity

Not considered as a product presenting risks of explosion. (*Nickel sulphate)

Section 10. Stability and Reactivity**Conditions to
Avoid/Incompatibility
(Materials to Avoid)**

Extremely reactive or incompatible with acids. Nonreactive with reducing agents, combustible materials, organic materials, metals, moisture.

**Hazardous Thermal
Decomposition /
Combustion Products**

Some metallic oxides. Hydrogen Cyanide (HCN)

Stability

The product is stable.

Hazardous Polymerization

Will not occur.

Section 11. Toxicological Information**Acute Data (LD50, LC50)****- Toxicity to Test Animals**

Acute oral toxicity (LD50): 2021 mg/kg (Rat) (Calculated value for the mixture).

Inhalation

Very hazardous in case of inhalation (lung sensitizer). Very slightly hazardous in case of inhalation (lung irritant). Non-hazardous in case of inhalation. Non-corrosive for lungs.

Ingestion

Can be fatal if inhaled or ingested.

Eye Contact

Moderately irritating to eyes.

Skin Contact

Very hazardous in case of skin contact (sensitizer). Very slightly hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Chronic effects

Repeated exposure to an highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Sensitization

Very hazardous in case of skin contact (sensitizer), of inhalation (lung sensitizer).

Target Organ Effects

Contains material which causes damage to the following organs: blood.

Carcinogenic effects

Classified None. by OSHA [*Gold Potassium Cyanide Salt]. Classified 3(a) (Possible for humans.) by European Union [*Nickel sulphate].

Mutagenic effects

Classified None. for humans [*Gold Potassium Cyanide Salt]. Classified None. for humans [*Nickel sulphate].

Teratogenic effects

Classified Reproductive system/toxin/female, Reproductive system/toxin/male [None.] [*Gold Potassium Cyanide Salt]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [None.] [*Nickel sulphate].

Developmental Toxicity Effects

DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [None.] [*Gold Potassium Cyanide Salt]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [None.] [*Nickel sulphate].

Narcosis

Not available.

Section 12. Ecological Information

Mobility

Not available.

Degradability

Not available.

Accumulation

Not available.

Ecotoxicity

Not available.

Other Adverse Effects

Not available.

Section 13. Disposal Considerations

Waste & Handling Information

Waste must be disposed of in accordance with Environmental Protection (Duty of Care) Regulations 1991.

Contact your licensed contractor for detailed recommendations. Follow applicable Federal, state and local regulations.

Section 14. Transport Information

UN Number

Not applicable.

Proper Shipping Name

IATA

Not applicable.

ADR/RID Classification

CLASS 8: Corrosive liquid.

UNNA/Shipping Name PG (Europe) ADR

Shipping name: CORROSIVE LIQUIDS, N.O.S. UNNA: UN1760 PG: b

RQ (Reportable Quantity)

ADR

Not available.

HI/Kemler

Not available.

CEFIC Tremcard

Not available.

IMO/IMDG Classification

Not controlled under IMDG.

ICAO/IATA Classification

Not controlled under IATA. Packing Group Not applicable.

TDG Classification

Not controlled under TDG (Canada).

DOT Classification

Not a DOT controlled material (United States).

UK Hazchem

Not available.

Section 15. Regulatory Information**EU Regulations****Hazard Symbol(s)**

:

 DSD Class Xn Harmful Letter DSD Class N Environment Letter**Harmful, Dangerous for the environment****Risk phrases**

: R32- Contact with acids liberates very toxic gas. R40- Possible risks of irreversible effects. R42/43- May cause sensitization by inhalation and skin contact. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases

: S23- Do not breathe gas/fumes/vapour/spray S24- Avoid contact with skin. S36/37- Wear suitable protective clothing and gloves. S57- Use appropriate containment to avoid environmental contamination. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains

: - *Nickel sulphate

Other EU Regulations**National Regulations**

Not available.

Section 16. Other Information

References

Not available.

**Version
Number**

1.0

Validated on 22/09/2010.

Printed 18/07/2012.

**Notice to
Reader**

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