

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION****1.1 Product identifier**

Trade name: Gold Solution

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses: Electrolyte for plating gold.

Uses advised against: All other uses.

**1.3 Details of the supplier of the Safety Data Sheet**Goldgenie  
Wenta Business Centre  
1 Electric Avenue  
London, EN3 7XU

Phone: +44 208 804 6200

Website: [www.goldgenie.com](http://www.goldgenie.com)**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]:**

Acute toxicity, Oral, Category 4

Acute toxicity, Dermal, Category 3

Skin Sensitization, Category 1

**2.2 Label elements****Labelling according to Regulation (EC) No. 1272/2008 [CLP]:**

Signal word: Danger

**Hazard Statements:**

H302 Harmful if swallowed.

H313 May be harmful in contact with skin.

H317 May cause an allergic skin reaction.

**Precautionary statements:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/spray.

P280 Wear protective gloves/ protective clothing/eye protection/face protection.

P301+310 IF SWALLOWED: Immediately call a POISON

CENTRE or doctor/physician.

**2.3 Other hazards**

# SAFETY DATA SHEET

Product Names: Gold Solution

Revision number: 001 Date: 08/09/2022

None known.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture meeting the criteria for classification in accordance with Regulation (EC) No. 1272/2008.

### Hazardous ingredients:

Name	CAS No.	GHS classification	% (w/v)
Potassium dicyanoaurate(I)	13967-50-5	Acute Tox. 2, H300 Acute Tox. 1, H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	1 – 2
Ammonium cobalt (II) sulphate hexahydrate	13586-38-4	Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye irrit. 2, H319 STOT SE 3, H335	0.25 – 1

The exact percentages (concentration) of composition have been withheld as a trade secret.

### Additional information:

For the full text of the H-statements mentioned in this section, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

**Following inhalation:** Move to fresh air. If any signs or symptoms occur, seek medical advice.

**Following skin contact:** Wash immediately with plenty of soap and water. If skin irritation or rash occurs: Get medical advice.

**Following eye contact:** Flush eyes with water as a precaution.

**Following ingestion:** After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

**Protection of first aider:** Not applicable.

### 4.2 Most important symptoms and effects

**Symptoms:** The known symptoms and effects are described in section 2.2 of this SDS.



## SAFETY DATA SHEET

Product Names: Gold Solution

Revision number: 001 Date: 08/09/2022

**Risks:** Untreated symptoms may result in additional health risks.

### 4.3 Indication of any immediate medical and special treatment

The physician may contact the national poison centre for advice.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media:** Dry chemical, CO<sub>2</sub>, water spray or alcohol-resistant foam.

**Unsuitable extinguishing media:** No data available.

### 5.2 Specific hazards arising from mixture

In combustion emits toxic fumes.

### 5.3 Advice for fire fighters

#### Special protective equipment for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

### 5.4 Other information

No other information available.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1 NOTES FOR NON-EMERGENCY PERSONNEL:** Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

**6.2 Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

**Notes for those trained to participate in an emergency:**

**6.3 ACCIDENTAL RELEASE MEASURES:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

Recommendations for personal protective equipment selection are noted above. Dispose in accordance with section 13 of this document.

## SECTION 7: HANDLING AND STORAGE



# SAFETY DATA SHEET

Product Names: Gold Solution

Revision number: 001 Date: 08/09/2022

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection. For precautions see section 2.2

## 7.2 Conditions for safe storage, including any incompatibilities

**Storage Conditions:** Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**Incompatible materials:** See section 10.

## 7.3 Specific end uses

See section 1.2.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Control parameters according to the local regulations should be taken into account.

## 8.2 Exposure controls

### Engineering controls:

Ensure there is sufficient ventilation of the area.

### Personal Protective equipment:

Hand: Wear protective gloves

Body protection: Impervious clothing.

Eye: Depending on the use of this product splash or safety glasses may be worn in an industrial setting.

Respiratory: In the case of respirable dust and/or fumes, use self-contained breathing apparatus.

Other measures: No statement available.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Liquid
<b>Color:</b>	Purple
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	No data available
<b>pH:</b>	4.6 – 5.2
<b>Melting point/range:</b>	No data available
<b>Boiling point/range:</b>	No data available



## SAFETY DATA SHEET

Product Names: Gold Solution

Revision number: 001 Date: 08/09/2022

<b>Flash point:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Flammability:</b>	No data available
<b>Upper/lower flammability or explosive limits:</b>	No data available
<b>Vapor pressure:</b>	No data available
<b>Vapor density:</b>	No data available
<b>Relative Density:</b>	1.07
<b>Solubility(ies):</b>	No data available
<b>Partition coefficient (n-octanol/water):</b>	No data available
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Explosive properties:</b>	No data available
<b>Oxidizing properties:</b>	No data available

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

None under normal use conditions.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

No data available.

#### 10.4 Conditions to avoid

No data available.

#### 10.5 Incompatible materials

Strong oxidizing agents.

#### 10.6 Hazardous decomposition products

In case of fire: see section 5.2

No other data available.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### General information:

This product does not contain known human carcinogens.

#### 11.1 Information on toxicological effects

##### Acute Toxicity:

LD50 rat: 2871 mg/kg (based on LD50 rat: potassium dicyanoaurate(I) = 29 mg/kg).



## SAFETY DATA SHEET

Product Names: Gold Solution

Revision number: 001 Date: 08/09/2022

**Skin corrosion/irritation:**

No statements available for any of the ingredients.

**Serious eye damage/irritation:**

No statements available for any of the ingredients.

**Respiratory or skin sensitization:**

No statements available for any of the ingredients.

**Germ cell mutagenicity:**

No statements available for any of the ingredients.

**Carcinogenicity:**

This product does not contain known human carcinogens.

**Reproductive toxicity:**

No statements available for any of the ingredients.

**STOT – single exposure:**

May cause respiratory irritation.

**STOT – repeated exposure:**

No statements available for any of the ingredients.

**Aspiration hazard:**

No statements available for any of the ingredients.

**Likely route(s) of exposure:**

Skin exposure and eye exposure are the most likely to occur. Accidental ingestion is also possible.

### SECTION 12: ECOLOGICAL INFORMATION

**General information:**

No statements available for any of the ingredients.

**12.1 Toxicity**

No statements available for any of the ingredients.

**12.2 Persistence and degradability**

**Physical- and photochemical elimination:**

No statements available for any of the ingredients.

**Biodegradation:**

No statements available for any of the ingredients.



## SAFETY DATA SHEET

Product Names: Gold Solution

Revision number: 001 Date: 08/09/2022

### 12.3 Bioaccumulative potential

No statements available for any of the ingredients.

### 12.4 Mobility in soil

#### Known/Predicted environmental distribution:

No statements available for any of the ingredients.

#### Surface tension:

No statements available for any of the ingredients.

#### Adsorption/Desorption:

No statements available for any of the ingredients.

### 12.5 Results of PBT and vPvB assessment

This product does not contain components which are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

No statements available for any of the ingredients.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product:

Can be disposed of with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. Smaller quantities can be disposed of with household waste.

#### Waste material:

Disposal must be made according to official regulations.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID/IDMG/IATA: Non-regulated

### 14.2 UN proper shipping name

ADR/RID/IDMG/IATA: Non-regulated

### 14.3 Transport hazard class(es)

ADR/RID/IDMG/IATA: Non-regulated



## SAFETY DATA SHEET

Product Names: Gold Solution

Revision number: 001 Date: 08/09/2022

### 14.4 Packing group

ADR/RID/IDMG/IATA: Non-regulated

### 14.5 Environmental hazards

ADR/RID/IDMG/IATA: Non-regulated

### 14.6 Special precautions for user

No statements available.

### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable, as product is not shipped in bulk.

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No restrictions applicable, according to appendix XVII of REACH.

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION

### Complete text of Globally Harmonized System of Classification and Labelling of Chemicals hazard statements as listed in section 3:

H302 Harmful if swallowed.  
H313 May be harmful in contact with skin.  
H317 May cause an allergic skin reaction.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation  
H400 – Very toxic to aquatic life.  
H410 – Very toxic to aquatic life with long lasting effects.

### Further information

The information presented in this Safety Data Sheet (SDS) is accurate to the best of our knowledge at the date of publication. The information given within the SDS is meant solely as a guide for safe handling, use, transportation, processing, storage, release and disposal. In no means can the information within the SDS be considered as a warranty or specification for quality.