# Safety Data Sheet

## 1. Identification

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| Chemicals Name：Potassium Gold Cyanide |
| Other Names：$KAu(CN)_2$、Powder Gold、Gold Salt |
| Recommended use and restrictions on use：Dangerous substance used in electroplating, only be used for industrial purposes. |
| Manufacturer/ Supplier, address, and phone numbers ：<br>HON HAI PRECISION IND.CO., LTD.<br>No.2, ZiYou St., TuCheng Dist., New Taipei City, 23678, Taiwan<br>(02)2268-3466 EXT.5019 20377 |
| Emergency contact phone numbers/fax numbers： (02)2268-3466 EXT.5019 20377<br>Fax: (02)2268-8110 |

## 2. Hazard(s) identification

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| Chemicals hazard class：<br>Acute toxicity category 3(Inhalation)、Acute toxicity category 3(skin)、Hazardous to the aquatic environment, chronic toxicity Category 1 |
| Label content：<br>  <br>Symbol：Skull and crossbones, Environment<br>Warning：Danger<br>Hazard statement： Fatal if swallowed. Causes mild skin irritation. Very toxic to aquatic life<br>Precautionary statement： Keep container tightly closed. Wear suitable protective clothing. Avoid release to the environment. |
| Other hazards： - |

## 3. Composition/information on ingredients

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| Chinese and English name：金氰化鉀 Potassium Gold Cyanide |
| Synonyms：$KAu(CN)_2$、Powder Gold、Gold Salt |
| Chemical Abstract Service No. (CAS No.) ：13967-50-5 |
| The hazardous ingredient (% of the content) ：100% |

## 4. First-aid measures

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| The first aid measures for different exposure routes：<br>Inhalation：1.Supply fresh air.<br>2. If required, execute CPR immediately. Avoid using the mouth-to-mouth.<br>3. In case of shortness of breath, give oxygen.<br>4. Call a physician immediately.<br>Skin contact：Put off contaminated clothing and wash skin with soap and water. Keep the victim breathing and the body warm. Supply oxygen if available. Seek medical attention urgently.<br>Eye contact：Hold the eyelid wide open and irrigate with water or isotonic saline solution for 15 minutes. Seek medical attention urgently.<br>Ingestion：Gargle mouth with water and give water, milk, or drink. Give oxygen if available. Seek medical attention urgently. |
| The most important symptoms and hazardous effects：The most important known symptoms and effects are described in the labeling(see section 2 and/or in section 11) |
| The protection of first-aiders：Not a chemical protective clothing and breathing apparatus shall not enter the full body of personnel handling the disaster victims, should wear protective equipment c-level first aid the safe zone.。 |
| Notes to physicians：1.Cosider in amyl nitrite detoxification。 **2.**Consider gastric lavage. |

5. Fire-fighting measures

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| Suitable fire extinguishing media：Select the suitable kind of extinguishers to put out the fire. Do not use the CO2 extinguisher or acidity chemical powder extinguisher, for avoiding producing HCN gas which is absolutely toxic to human body. This material is not flammable; nevertheless, it may produce toxic fumes when involved in a fire. Keep up-wind of fire and wear self-contained breathing apparatus and personal protective equipment. Use extinguishers suitable for the surrounding fire. |
| Specific hazards may be encountered during fighting：- |
| Specific fire-fighting methods：1. Available water mist to extinguish the fire of Potassium gold cyanide the storage area.<br>2. If there is no danger, remove the Potassium gold cyanide. |
| Special equipment for the protection of firefighters：Firefighters must wear full body chemical protective clothing and breathing apparatus. |

6. Accidental release measures

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| Persona precautions：1.Before ther contaminated area has not been fully cleaned, restricted from approaching the area.<br>2. Use personal protective equipment as required. |
| Environmental precautions：1.Leak area ventilation.<br>2. The official government report on health and safety and environmental protection-related units. |
| Methods for cleaning up： A few spillage or leakage with sand or sorbent absorption, then wash with water, then oxidation with sodium hypochloride. |

7. Handling and storage

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| Handling：1.Use a closed container<br>2. Avoid release to vapours, dust in workspace.<br>3. Available with immediate emergency treatment equipment. |
| Storage：1. Keep container tightly closed. Keep only in original container.<br>2. Store in a well-ventilated place.<br>3. Lack of regular inspections. |

8. Exposure controls/personal protection

| Engineering control：Local exhaust | | | |
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| Control parameters | | | |
| 8 hours time weighted average exposure limits TWA | Short-term exposure limits STEL | maximum exposure limits CEILING | Biological standards BEI |
| 5mg/m3 | NA | NA | 5mg/m3 |
| Personal protective equipment：<br>Respiratory protection：Dustproof and anti-gas type masks; emergency need to use self-contained breathing apparatus.<br>Hand protection：Chemical resistance Gloves<br>Eye protection：Chemical safety goggles or face shield<br>Skin and body protection：Chemical resistance shoes, protective clothing, work aprons | | | |
| Hygiene measures： 1.Do not diet, smoking in the workspaces. Develop good personal habits.<br>2.After work, should be thoroughly clean the skin, hands and face.<br>3.Do not touch the wound with cyanide<br>4.Shoes and other clothes after work should be thoroughly cleaned | | | |

9. Physical and chemical properties:

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| Appearance (physical state, color etc.)：White powder | Odor：Bitter almond flavor |
| Odor threshold：-- | Melting point：-- |
| pH value：9-10 | Boiling point/boiling point range：ND |
| Flammability(solid、gas)-- | Flash point： not flammable<br>Test method(Open cup or closed cup)： |
| Decomposition temperature：Decomposes on heating | Auto-ignition temperature： NA |
| Explosion limits： not explosive NA | Vapor pressure：NA |
| Vapor density：NA | Density： 3.45 (Water=1) |
| Solubility：in water: 14.3gm/100c.c(cold)<br>200gm/100c.c(hot) | Partition coefficient(n-octanol/water,lob Kow)：-- |
| Evaporation rate：/ | |

10. Stability and reactivity

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| Stability：Stable in general environment. |
| Possible hazardous reactions under specific conditions：Once reacts with acid, acid fumes and slowly with carbon-dioxide from moist air to produce the very toxic gas, Hydrogen Cyanide (HCN). |
| Conditions to avoid：Avoid contact with strong oxidizing agents. |
| Materials to avoid：Strong oxidizing agents, acids and acid salts. |
| Hazardous decomposition products：HCN and metal fumes |

11. Toxicological information

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| Routes of exposure：Eye contact. Skin contact. Inhalation. Ingestion. |
| Symptoms：Dizziness, palpitation, chest-tightness, heartbeat-acceleration, breath-cease, bereaving anesthesia. |
| Acute toxicity：Inhalation：1.Dust can irritate the nose and throat.<br>2.Symptoms include Dizziness, palpitation, chest-tightness, heartbeat-acceleration, breath-cease, bereaving anesthesia.<br>Eye：1.Dust and its solution can be irritating.<br>Skin：1.Dust may be irritating.。<br>2.Dust and liquid will be absorbed by the skin caused by the inhalation of the same symptoms.<br>Ingestion：Quickly be absorbed same as inhalation. The mouth, throat will irritation.<br>$LD_{50}$(Animal testing, absorption)：129mg/ kg (rats. swallow)<br>$LC_{50}$(Animal testing, absorption)：-- |
| Chronic toxicity or long term toxicity：Include persistent runny nose, dizziness, palpitation, vertigo, headache, vomiting, chest tightening, rapid, heartbeat, respiratory depression, loss of consciousness. |

12. Ecological information:

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| Ecotoxicity： $LC_{50}$(fish)：--<br>$EC_{50}$(Aquatic invertebrates)：--<br>BCF：-- |
| Persistence and degradability： 1. Most of urine from the body will break down into less toxic compounds, a small amount of raw material will be discharged from the type of perspiration and urine.<br>2. Released into the water from the solution would be<br>Half-life (Air)：--<br>Half-life (water surface)：--<br>Half-life (ground water)：--<br>Half-life(soil)：-- |
| Bio-accumulative potential：-- |
| Mobility in soil：-- |
| Other adverse effects：-- |

## 13. Disposal considerations

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| Methods of waste disposal：1. According to the current regulations<br>2. Waste disposal in accordance with the storage conditions. |

## 14. Transport information

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| (IATA)United Nations number：U.N.NO.1588,CLASS6.1,PACKING GROUP III ADR 260141(b) |
| (IATA)UN Proper shipping name：Cyanides, Inorganic, Solid. N.O.S. |
| Transport hazard class：Class 6.1 poisonous material |
| Packing category：III |
| Marine pollutant(Yes/No)：Yes |
| Specific transport measures and precautionary conditions：-- |

## 15. Regulatory information

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| Applicable regulations：<br>**1.**Occupational safety and sanitation rules<br>**2.**Regulations for the Labeling and Hazard Communication of Hazardous Chemicals<br>**3.**Specific chemical hazard prevention standards<br>**4.**Permissible Exposure workplace labor standards<br>**5.**Road traffic safety rules<br>**6.**Industrial waste treatment and storage facilities to clear standards<br>**7.**Toxic and Concerned Chemical Substances Control Act |

## 16. Other information

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| Literature references | - | |
| Organization that prepared the SDS | Name：HON HAI PRECISION IND.CO., LTD. | |
| | Address/telephone number：<br>No.2, Ziyou St., Tucheng Dist., New Taipei City, 23678, Taiwan<br>(02)2268-3466 EXT.5019 20377 | |
| Person who prepared the SDS | Title：Director | Name (signature) ：Chun-Yi.Chang |
| Date that the SDS was prepared | MAY.13.2024 | |
| remarks | The above information symbol"-"represents the current investigation no relevant information, and the symbol "/" represents the substance of this field does not apply. | |