

**Safety Data Sheet**  
29 CFR 1910.1200

**Section 1: Company and Product Identification**


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**Product Name:** Potassium tetrachloroaurate (III)

**Product Code:** 2009

**CAS #:** 13874-02-7

**Company:** Colonial Metals, Inc.

Building 20

505 Blue Ball Road

Elkton, MD 21921 United States

Company Contact: EHS Director

Telephone Number: 410-398-7200

FAX Number: 410-398-2918

E-Mail : info@colonialmetals.com

Web Site: www.colonialmetals.com



www.colonialmetals.com

**Emergency Response:** Supplier Emergency Contacts & Phone Number

Chemtrec: 800-424-9300

World Wide - Call COLLECT to U.S: 703-527-3887

**Section 2: Hazards Identification**


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**Hazard Pictograms:**



**Signal Word:** Warning

**Hazard Category:** Skin corrosion/irritation Cat 2  
Serious eye damage/eye irritation Cat 2  
Specific target organ tox, single exp. Cat 3 (resp irrit)

**Hazard Statements:** H315: Causes skin irritation  
H319: Causes serious eye irritation  
H335: May cause respiratory irritation

**Precautionary Statements:** P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
P264: Wash thoroughly after handling  
P271: Use only outdoors or in a well-ventilated area  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P302+352: IF ON SKIN: Wash with soap and water  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove  
P312: Call a POISON CENTER or doctor/physician if you feel unwell  
P321: Specific treatment (see ... on this label)  
P332+313: If skin irritation occurs: Get medical advice/attention  
P337+313: If eye irritation persists get medical advice/attention  
P362: Take off contaminated clothing and wash before reuse  
P403+233: Store in a well ventilated place. Keep container tightly closed  
P405: Store locked up  
P501: Dispose of contents/container in accordance with

**Hazards not otherwise classified:**

To the best of our knowledge the chemical, physical, and toxicological effects of this compound have not been thoroughly investigated.

**Section 3: Composition / Information on Ingredients**


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Hazardous substance (name)	Hazard Category	CAS#	Weight %
Potassium tetrachloroaurate (III)	Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3	13682-61-6	98 - 100
<b>Chemical Family:</b> Group 1B Metal Salt <b>Chemical Formula:</b> KAuCl <sub>4</sub> .XH <sub>2</sub> O <b>Synonyms:</b> Gold potassium chloride, Potassium gold (III) chloride			

**Section 4: First Aid Measures**

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**General Info:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Notable Exposure symptoms:** Irritation to skin, eyes and may cause irritation if inhaled.

**If ingested:** Never give anything by mouth to an unconscious person. Rinse mouth. Seek immediate medical attention. Clear the airway and administer artificial respiration if not breathing. Do not induce vomiting unless directed to do so by medical personnel.

**If inhaled:** Remove the victim from the contaminated area while protecting yourself from exposure by wearing an appropriate respirator. Put a similar respirator on the victim if possible. Get medical attention immediately.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Get medical attention if irritation develops or persists.

**Skin contact:** Take off immediately all contaminated clothing. Rinse with water thoroughly. Get medical advice if irritation develops or persists.

**Additional Info:** Observe for any symptoms for several hours after exposure. Follow up with medical attention if symptoms develop.

**Section 5: Fire Fighting Measures**

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**General Info:** Use proper safety equipment. If this product is involved in a fire Hydrogen chloride and metal oxide fume can be released.

**Extinguishing Method /** Product is not flammable, Use firefighting methods suitable to fight surrounding fires

**Hazardous Decomposition Info:** Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear. Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

**Section 6: 6. Accidental Release Measures**

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**Personal precautions, protective equipment and procedures:** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment (SCBA) and clothing during clean-up. Avoid breathing vapor. Ventilate area if easy to do so and wash spill site after clean up is complete. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Containment Equipment and Procedures:** **Large Spills:** Dike major spills. Do not let product enter drain. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Dispose contaminated material as waste. Ensure adequate ventilation

**Cleanup Procedures:** Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is necessary, utilize vacuum cleaner, provided adequate ventilation is available.

**Section 7: Handling and Storage**

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**Safe Handling Precautions:** Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling.

**Work/Hygienic Practices** Always use good personal hygiene after handling

**Recommendations for Storage:** Store in a tightly sealed container in a cool, dry, well-ventilated place.

**Other Precautions:** If a dust forms, utilize a 0.01 ppm high efficiency particulate respirator/supplied air respirator/self-contained breathing apparatus; 0.2 ppm same as above with full face piece; 1 ppm powdered air purifying respirator with high efficiency filter/type C supplied air respirator operated in pressure demand mode.

**Section 8: Exposure Control / Personal Protection**

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**General / Engineering Controls:** Ventilation: Local Exhaust: Required in handling area  
Mechanical: Desirable to insure concentration of material below TLV/TWA levels  
Other: Closed ventilation system (Laboratory Fume Hood)

**Work Clothing:** Protective work clothing which covers skin and prevents exposures. Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

**Eye/face protection:** Wear safety glasses with side shields or goggles or face shield.

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** NIOSH approved chemical cartridge respirator for acid gas/chlorine (42 CFR part 84) and self-contained breathing apparatus with full face shield.

**Additional Information:**

**Section 9: Physical and Chemical Properties**

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<b>State:</b> Solid	<b>Melting Point:</b> 357 °C	<b>Freezing Point:</b> No data available
<b>Color:</b> Yellow-Orange Crystalline	<b>Boiling Point/Range:</b> No data available	<b>pH:</b> No data available
<b>Molecular Wt.</b> 467.95 g/mole	<b>Odor:</b> No data available	<b>Water Solubility:</b> No data available
<b>Evaporation rate:</b> No data available	<b>Flash Point:</b> No data available	<b>Part. Coeff (n-octanol/water):</b> No data available
<b>Upper Flam Limits:</b> No data available	<b>Lower Flam Limits:</b> No data available	<b>Vapor Density:</b> No data available
<b>VOC Content (lbs/gal):</b> No data available	<b>Viscosity:</b> No data available	<b>Auto ignition Temp:</b> No data available
<b>Specific Gravity:</b> No data available		

**Section 10: Stability and Reactivity**

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**General:** This product is stable and non-reactive under normal conditions of use. Product is not subject to hazardous polymerization. Avoid open flame and ignition sources.

**Incompatible materials:** Oxidizing agents, ammonia, Gold can form explosive compounds with ammonia, ammonium hydroxide + aqua regia, and hydrogen peroxide.

**Decomposition products:** Hydrogen chloride, Metal oxide fumes. Decomposition will not occur if used and stored according to specifications

**Section 11: Toxicological Information**

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**General Information:** Gold compounds may cause irritation to the eyes and respiratory tract. Aplastic anemia may result from damage to the blood forming organs. Gold has caused tumors and reproductive effects in laboratory animals via implant,

**Toxicological Information (product):** To the best of our knowledge, the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

**Likely Routes of Exposure:** Eye Contact  
Skin Contact  
Inhalation  
Ingestion - possible, but considered unlikely.

**Toxicological Information (contained substances)**

**Acute Toxicity:** No data available

**Germ cell mutagenicity:** No data available

**Carcinogenicity: IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Specific target organ toxicity - single exposure:** No data available

**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration Hazard:** No data available

**Sensitization:** Product is not expected to be a sensitizer.

**Section 12: Ecological Information**

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**General information:** No Data Available

**Aquatic toxicity:** No Data Available

**Degradation / Mobility info:** No Data Available

**Bioaccumulative potential:** No Data Available

**Section 13: Disposal Information**

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**Product disposal:** Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation

**Container disposal:** Treat empty containers with extra care. Consult waste contractor.

**Other considerations:** NOTE: Chemical additions, processing, or otherwise altering this material may make the waste management information presented above incomplete, inaccurate, or otherwise inappropriate.

**Section 14: Transport Information**

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**DOT:** Not considered hazardous for transportation

**IMO/IMDG:** Not considered hazardous for transportation

**IATA:** Same as DOT, always consult IATA manual before shipping

**OTHER:** Inquire for further transport information.

**Section 15: Regulatory Information**

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**TSCA:** All components of this compound are on the TSCA inventory.

**Canadian Regulatory Information:** This product is listed in the DSL

**European Union (EU) Regulatory Hazard symbol:** Xi Irritant

**Information: Risk phrases:** 36/37 Irritating to eyes and respiratory system

**Safety phrases:** 26 In case of contact with eyes, rinse immediately with plenty of water and seek

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** No SARA Hazards

**MA Right To Know Components:** No components are subject to the Massachusetts Right to Know Act.

**PA Right To Know Components:** Potassium tetrachloroaurate(III), CAS #13682-61-6

**NJ Right To Know Components:** Potassium tetrachloroaurate(III), CAS #13682-61-6

**California Prop. 65 Components** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other

**Section 16: Other Information**

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**NFPA Rating**

Health: 2

Fire: 0

Reactivity: 0

**HMIS Rating**

Health: 2

Fire: 0

Reactivity: 0

Personal

Protection: J

**Disclaimer:** In compliance with the OSHA Hazard communication Standard, 29 C.F.R 1910.1200, we are providing you with a Materials Safety Data Sheet (MSDS) for the hazardous material you are purchasing.

*It is your responsibility to educate your employees on the safe use of the hazardous material. With this in mind, a copy should be forwarded to the supervisor of the user or to the user themselves, and copy should be retained in your files for future reference.*

*Colonial Metals, Inc. makes no presentation as to the accuracy of the information in the MSDS. The information is believe to be correct; however, you (the customer), should preform your own investigation and independent verification. If you resell the product, you are responsible to forward the information in the MSDS to your customer.*

Colonial Metals, Inc.

**SDS Author:** Dr. Ernest Addo

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