

CMI Product #2017

**Safety Data Sheet**  
29 CFR 1910.1200

**Section 1: Company and Product Identification****Product Name:** Potassium dicyanoaurate(I)**Product Code:** 2017

**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** Supplier Emergency Contacts & Phone Number**Response:** Chemtrec: 800-424-9300

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

**Section 2: Hazards Identification****Hazard Pictograms:****Signal Word:**

Danger

**Hazard Category:**

Acute tox, oral Cat 1/2  
Acute tox, inh. Cat 1/2  
Acute tox, dermal Cat 1/2  
Hazard to aquatic environment, acute Cat 1  
Hazard to aquatic environment, chronic Cat 1

**Hazard Statements:**

H300: Fatal if swallowed  
H330: Fatal if inhaled  
H310: Fatal in contact with skin  
H400: Very toxic to aquatic life  
H410: Very toxic to aquatic life with long lasting effects

**Precautionary Statements:**

P260: Do not breathe dust/fume/gas/mist/vapors/spray  
P264: Wash thoroughly after handling  
P270: Do not eat, drink or smoke when using this product  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P284: Wear respiratory protection  
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or  
P302+350: IF ON SKIN: Gently wash with plenty of soap and water  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
P310: Immediately call a POISON CENTER or doctor/physician  
P361: Remove/Take off immediately all contaminated clothing  
P403+233: Store in a well ventilated place. Keep container tightly closed  
P405: Store locked up  
P501: Dispose of contents/container in accordance with local/regional/national/international rules.

**Hazards not OSHA Hazards:** Highly toxic by inhalation, Highly toxic by ingestion, Highly toxic by skin absorption  
**otherwise** *Contact with acids liberates very toxic gas.*  
**classified:**

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

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Potassium dicyanoaurate(I)	Toxic/Irritant	13967-50-5	
<b>Product Name:</b> Potassium dicyanoaurate(I) <b>Chemical Formula:</b> C2AuKN2 <b>Synonyms:</b> Potassium gold cyanide			

**Section 4: First Aid Measures**

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

**Notable Exposure Eye Hazards:** May causes eye irritation

**symptoms: Skin Hazards:** May cause skin irritation. May be fatal if absorbed through skin.

**Ingestion Hazards:** May be fatal if swallowed

**Inhalation Hazards:** May be fatal if inhaled. May cause respiratory tract irritation

**If ingested:** Rinse mouth. Seek immediate medical attention. Clear the airway and administer artificial respiration if not breathing.

If swallowed, 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 immediately.

**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**

**General Info:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Emits toxic fumes under fire conditions. Can decompose to emit toxic chlorine vapor.

**Extinguishing** Water spray, alcohol resistant foam, dry chemical or carbon dioxide.

**Method /**

**Hazardous** 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

**Info:** breathing apparatus and full protective clothing

**Section 6: Accidental Release Measures**

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

**Containment** Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust. Sweep up Equipment and and shovel into a sealed container. Personnel to be protected with full face shield and proper respirator.

**Procedures:** Collect material and dispose

**Cleanup** 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. Do not flush with water. Do not let product enter drains. Discharge into the environment must be avoided.

**Section 7: Handling and Storage**

**Safe Handling** Do not handle until all safety precautions have been read and understood. Keep containers tightly closed

**Precautions:** Ensure adequate ventilation. Avoid breathing dust/vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling.

**Recommendations** Store in cool, dry area in a tightly closed product container away from sources of ignition or flame. Never for **Storage:** allow product to get in contact with water during storage. Do not store near acids.

**Incompatibilities:** Store away from strong volatile acids. Refer to Section 10.

**Other Precautions:** .01 ppm high efficiency particular 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. Store in a sealed container, plastic or plastic liner, in a cool, well ventilated, dry area away from volatile acids.

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

**General / Ventilation:** Local Exhaust: Required in handling area

**Engineering** Mechanical: Desirable to insure concentration of material below TLV/TWA levels

**Controls:** Other: Closed ventilation system with corrosive resistant materials

**Work Clothing:** Protective work clothing which covers skin and prevents exposures.

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

**Skin Protection:** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory** Where risk assessment shows air-purifying respirators are appropriate use full-face particle respirator type

**Protection:** N(( US) or type 92 (EN 143) respirator cartridges as a back up to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

<b>Additional Information:</b>	<b>Components:</b>	<b>CAS-No:</b>	<b>Value :</b>	<b>Control Parameters:</b>	<b>Basis:</b>
Potassium dicyanoaurate(I) for Air	13967-50-5	TWA	5 mg/m3	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits	
Remarks: Skin Designation for Air		TWA	5 mg/m3	USA. OSHA - TABLE Z-1 Limits	
Values		C	5 mg/m3	Contaminants - 1910.1000 USA. ACGIH Threshold Limit (TLV)	
Upper Respiratory Tract irritation, Headache, Nausea, Thyroid effects, Danger of cutaneous absorption varies					

**Section 9: Physical and Chemical Properties**

<b>State:</b> Solid	<b>Melting Point:</b> N/A	<b>Freezing Point:</b> N/A
<b>Color:</b> White Powder/Crystals	<b>Boiling Point/Range:</b> N/A	<b>pH</b> N/A
<b>Molecular Wt.</b> 288.10 g/mole	<b>Odor:</b> N/A	<b>Water Solubility:</b> N/A
<b>Evaporation rate:</b> N/A	<b>Flash Point:</b> N/A	<b>Part. Coeff (n-octanol/water)</b> N/A
<b>Upper Flam Limits:</b> N/A	<b>Lower Flam Limits:</b> N/A	<b>Packing Density:</b> 3.45 g/mL at 25 °C (77 °F)
<b>VOC Content (lbs/gal):</b> N/A	<b>Specific Gravity:</b> N/A	<b>Autoignition Temp:</b> N/A

**Section 10: Stability and Reactivity**

**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:** Strong oxidizing agents, acids

**Decomposition products:** Hazardous decomposition products formed under fire conditions. Carbon oxides, nitrogen oxides (NOx), Potassium oxides

**Section 11: Toxicological Information**

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

**Toxicological Acute toxicity:****Information** Oral LD50**(product):** no data available

Inhalation LC50

Dermal LD50Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

**Likely Routes of Potential health effects:****Exposure:** **Inhalation:** May be fatal if inhaled. May cause respiratory tract irritation.**Ingestion:** May be fatal if swallowed.**Skin:** May be fatal if absorbed through skin. May cause skin irritation.**Eyes:** May cause eye irritation.**Toxicological Information (contained substances)****Carcinogenicity or mutagenicity:****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.**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

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:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. **Very toxic to aquatic life with long lasting effects.**

**Aquatic toxicity:** No specific data available. Do not allow large quantities of product to reach water, ground water, water courses or sewer systems.

**Degradation / Mobility info:** No specific data available.

**Bioaccumulative potential:** No specific data available.

**Section 13: Disposal Information**

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**Product disposal:** Dispose of product in accordance with local, regional, and national regulations. Consult with waste contractor.

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

**Other considerations:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. 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: Proper Shipping Name:**

CYANIDES, INORGANIC, SOLID, N.O.S. (Potassium dicyanoaurate(I))

**Hazard Class:**

6.1

**Secondary Hazard Class:**

NA

**Dot Identification Number:**

1588

**Dot Shipping Label:**

CYANIDES, INORGANIC, SOLID, N.O.S. (Potassium dicyanoaurate(I))

**Freight Class:**

NA

**Packaging Requirements:**

PG-I

**IMDG: UN number:** 1588 **Class:** 6.1 **Packing group:** I **EMS-No:** F-A, S-A**Proper shipping name:** CYANIDES, INORGANIC, SOLID, N.O.S. (Potassium dicyanoaurate(I))**Marine pollutant:** Marine pollutant**IATA: UN number:** 1588 **Class:** 6.1 **Packing group:** I**Proper shipping name:** Cyanides, inorganic, solid, n.o.s. (Potassium dicyanoaurate(I))**OTHER:** Inquire for further transport information.**Section 15: Regulatory Information**

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**TSCA:** All ingredients of this product are listed under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.**SARA 313 SARA Hazard Classes**

Acute Health Hazard

**SARA Section 313 Notification**

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.

**Right to Know State Regulations:****Components: Massachusetts Right To Know Components:**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components:**

Potassium dicyanoaurate(I) CAS-No. 13967-50-5 Revision Date 2007-03-01

**New Jersey Right To Know Components:**

Potassium dicyanoaurate(I) CAS-No. 13967-50-5 Revision Date 2007-03-01

**California Prop. 65 Components:**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Canadian** This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS**Regulatory** contains all the information required by the CPR.**Information:****European Union** Symbol of Danger: T**(EU) Regulatory** Indication of Danger: Toxic.**Information:**

R26/27/28 - Very toxic by inhalation, in contact with skin, and if swallowed

R32 - Contact with acids liberates very toxic gas

R36/37/38 - Irritating to eyes, respiratory system and skin

**Section 16: Other Information**

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**NFPA Rating**

Health: 4

Fire: 0

Reactivity: 0

Other:

**HMIS Rating**

Health: 4

Fire: 0

Reactivity: 0

Personal

Protection: K

**Precautionary Label:**

Highly toxic by inhalation

Highly toxic by ingestion

Highly toxic by skin absorption

**Disclaimer:** *In compliance with the OSHA Hazard communication Standard, 2.9 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:** John Kerchner

**Version Date:** 7/27/2015