

## Safety Data Sheet

### 29 CFR 1910.1200

#### Section 1: Company and Product Identification

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**Product Name:** Tetraammineplatinum(II)Nitrate

**Product Code:** 6030

**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:** Danger

**Hazard Category:** Acute tox, oral Cat 4  
 Acute tox, inh. Cat 4  
 Acute tox, dermal Cat 3  
 Skin corrosion/irritation Cat 2  
 Serious eye damage/eye irritation Cat 1  
 Specific target organ tox, single exp. Cat 3 (resp irrit)

**Hazard Statements:** H302: Harmful if swallowed  
 H332: Harmful if inhaled  
 H311: Toxic in contact with skin  
 H315: Causes skin irritation  
 H318: Causes serious eye damage

**Precautionary Statements:** P261: Avoid breathing dust/fume/gas/mist/vapors/spray  
 P264: Wash thoroughly after handling  
 P270: Do not eat, drink or smoke when using this product  
 P271: Use only outdoors or in a well-ventilated area  
 P280: Wear protective gloves/protective clothing/eye protection/face protection  
 P301+310: IF SWALLOWED: Immediately call a POISON CENTER or  
 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 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  
 P312: Call a POISON CENTER or doctor/physician if you feel unwell  
 P330: Rinse mouth  
 P332+313: If skin irritation occurs: Get medical advice/attention  
 P337+313: If eye irritation persists get medical advice/attention  
 P361: Remove/Take off immediately all contaminated clothing  
 P403+233: Store in a well ventilated place. Keep container tightly closed  
 P501: Dispose of contents/container in accordance with local/regional/national/international rules.

**Hazards not otherwise classified:**Conditions Aggravated By Exposure

Any respiratory conditions such as asthma. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization.

Conditions Aggravated By Overexposure

Not applicable, none known. The toxicological properties of this material have not been fully investigated.

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

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Tetraammineplatinum (II) Nitrate	Irritant/Corrosive	20634-12-2	0 - 99.9

**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 symptoms:** Irritation to skin, eyes and areas of contact.

**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 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: 5. Fire Fighting Measures****General Info: Fire And Explosion Hazards:**

Use proper safety equipment; can decompose to emit toxic ammonia and nitrous oxide (NOx) gases and can explode when exposed to high heat or flames. This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

**Extinguishing Method /** In case of fire, use water fog, dry chemical, CO2, or alcohol foam

**Hazardous Decomposition** Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear.

**Info:** In case of fire, can decompose to emit toxic ammonia and nitrous oxide (NOx) gases and can explode when exposed to high heat or flames.

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

**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 and clothing during clean-up. Avoid breathing dust/vapor. Ventilate area if easy to do so. Contact local authorities if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Containment Equipment and Procedures:** Contain actively spilling material if safe and easy to do so, avoid generating dust. Sweep up or soak up and place in a sealed container taking care to avoid dusting, Person protected with full face shield and proper respirator for acid gas and particulates. Ventilate area and wash spill site after pickup is complete. Collect material and dispose.

**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**

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

**Precautions:** closed Ensure adequate ventilation. Avoid breathing dust/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling. 0.01 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.

**Recommendations** Do not store directly on ground. Keep away from heat, sparks, flame, and other sources of ignition.

**for Storage:** Store in a dry place.

**Incompatibilities:** Mixing with organic reducing agents. Refer to Section 10.

**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 (Laboratory fume hood)

**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:** Wear chemical resistant gloves.

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

**Protection:** type N(( US) or type 92 (EN 143) respirator cartridges as a back up to engineering controls. If the respirators 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).

**Additional** Ingredient(s) - Exposure Limits

**Information:** Tetraammineplatinum (II) Nitrate  
 ACGIH TLV - 0.002 mg/m3 (as Pt.)  
 OSHA PEL - 0.002 mg/m3 (soluble salts)

**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> Off-White to Tan crystals	<b>Boiling Point/Range:</b> N/A	<b>pH</b> N/A
<b>Molecular Wt.</b> 387.27	<b>Odor:</b> Slight odor of NH3	<b>Water Solubility:</b> Soluble
<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>Vapor Pressure:</b> N/A
<b>VOC Content (lbs/gal):</b> N/A	<b>Viscosity:</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:** Mixing with organic reducing agents

**Decomposition products:** Ammonia and nitrous oxide (NOx) vapors.

**Section 11: Toxicological Information**

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**General Epidemiology****Information:** Irritating to skin and mucous membranes**Toxicological Information (product):** Product has not been tested. Prolonged inhalation may be harmful to human health. Irritating in case of skin or eye contact. May be harmful if swallowed or in contact with skin.**Likely Routes of Exposure:** Eye Contact

Skin Contact

Inhalation

Ingestion - possible, but considered unlikely.

**Toxicological Information (contained substances)****Carcinogenicity or mutagenicity:** No data available**Sensitization:** Product is not expected to be a sensitizer.**Other Notes:** Not applicable.**Section 12: Ecological Information**

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**General information:** Product not tested.**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:** 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**

Nitrates, inorganic, n.o.s. (tetraamineplatinum (II) Nitrate)

**Hazard Class**

5.1

**Secondary Hazard Class**

NA

**DOT Identification Number**

1477

**DOT Shipping Label****Oxidizer****Freight Class**

See 49 CFR

**Packaging Exceptions**

See 49 CFR

**Packaging Requirements**

PG II

**IATA:** IATA: Same as DOT regulation. Consult regulation before shipping.**OTHER:** Inquire for further transport information.**Comments:** None

**Section 15: Regulatory Information**

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**TSCA:** All ingredients of this product are excluded from listing under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory. **For R&D purpose only**

**Canadian Regulatory** This product has been classified in accordance with the hazard criteria of CPR, and the MSDS contains all the information required by the CPR.

**European Union Hazard Symbol:** Xi, O

**(EU) Regulatory Information:** Indication of Danger: Irritant and Oxidizing

**R: 5, 8, 36/38, 43**

**Risk Phrase:** Heating may cause an explosion. Contact with combustible material may cause fire. Irritating to eyes and skin. May cause sensitization by skin contact.

**S: 24, 26, 37**

**Safety Phrase:** Avoid contact with skin. In case of contact eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves.

**Section 16: Other Information**

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**NFPA Rating**

Health: 2  
Fire: 0  
Reactivity: 0  
Other: OX

**HMIS Rating**

Health: 2  
Fire: 0  
Reactivity: 0  
Personal  
Protection: J

**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:**

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