

CMI Product #6067-S

## Safety Data Sheet

### 29 CFR 1910.1200

#### Section 1: Company and Product Identification

**Product Name:** Platinum Nitrate

**Product Code:** 6067-S

**CAS #:** 7446-29-9

**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

	GHS07	GHS05	GHS06	GHS08
<b>Hazard Pictograms:</b>				
<b>Signal Word:</b>	Warning	Corrosive	Toxic	Health Hazard
<b>Hazard Category:</b>	Oxidizer Cat 2 Corrosive to metals Cat 1 Acute tox, dermal Cat 3 Skin corrosion/irritation Cat 1 Serious eye damage/eye irritation Cat 1 Sensitization, skin Cat 1 Specific target organ tox, single exp. Cat 3 (resp irrit)			
<b>Hazard Statements:</b>	H272: May intensify fire; oxidizer H290: May be corrosive to metals H311: Toxic in contact with skin H314: Causes severe skin burns and eye damage H318: Causes serious eye damage			
<b>Precautionary Statements:</b>	P280: Wear protective gloves/protective clothing/eye protection/face protection P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking P220: Keep/Store away from clothing/.../combustible materials P234: Keep only in original container P221: Take any precaution to avoid mixing with combustibles P271: Use only outdoors or in a well-ventilated area P260: Do not breathe dust/fume/gas/mist/vapours/spray P270: Do not eat, drink or smoke when using this product P264: Wash thoroughly after handling P272: Contaminated work clothing should not be allowed out of the workplace P391: Collect spillage P307+311: IF exposed: Call a POISON CENTER or doctor/physician P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P301: IF SWALLOWED: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P405: Store locked up			

**Hazards not Conditions Aggravated By Exposure**

**otherwise** Can cause severe irritation of the respiratory system. Maintain housekeeping and personal hygiene to  
**classified:** minimize exposure and prevent sensitization.

**Conditions Aggravated By Overexposure**

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

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

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Platinum Nitrate	Irritant	250584-28-2	30-40
Nitric Acid	Corrosive	7697-37-2	35-45
<b>Chemical Family:</b> Platinum Group Metal <b>Chemical Formula:</b> Pt(NO <sub>3</sub> ) <sub>2</sub> <b>Synonyms:</b> Platinum nitrate solution, aqueous			

**Section 4: First Aid Measures**

**General Info:** When consulting a physician, Show this safety data sheet to the doctor in attendance.

**Notable Exposure** Irritation to skin, eyes and areas of contact.

**symptoms:**

**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.

**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**

**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

**Fire And Explosion** Finely divided platinum may ignite if contacted with flammable organic solvents. Powders may be

**Hazards:** subjected to self-heating if hydrogen or carbon monoxide are occluded.

**Extinguishing** Use water spray, foam, dry chemical, carbon dioxide, or medium for primary source.

**Method /**

**Hazardous** Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear

**Decomposition** self-contained breathing apparatus and full protective gear. Use NIOSH/MSHA approved self-

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

**Section 6: Accidental Release Measures**

**Personal** Dilute with water and mop up or absorb with an inert material and place in appropriate waste disposal  
**precautions,** container. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak.

**protective** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear  
**equipment and** appropriate protective equipment and clothing during clean-up. Avoid breathing dust/vapors. Ventilate  
**procedures:** 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** Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust.  
**Equipment and Personnel** to be protected with full face shield and proper respirator. Collect material and dispose  
**Procedures**: Small Spills: Dilute with water or suitable absorbent sweep and collect to waste receptacles for recovery.

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

## Section 7: Handling and Storage

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**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/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 sealed container, plastic or plastic liner, in  
**for Storage**: a cool, well ventilated, dry area away from volatile acids and away from sources of ignition or flame.

**Incompatibilities**: Store away from organics and solvents. 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

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**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 Safety shower and eyewash

**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

**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** Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene

**Information**: facilities for washing

## Section 9: Physical and Chemical Properties

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<b>State</b> : Liquid	<b>Melting Point</b> : N/A	<b>Freezing Point</b> : N/A
<b>Color</b> : dark red solution	<b>Boiling Point/Range</b> : N/A	<b>pH</b> : <1
<b>Molecular Wt.</b> : 387.203 g/mol	<b>Odor</b> : Strong acidic smell	<b>Water Solubility</b> : soluble
<b>Evaporation rate</b> : N/A	<b>Flash Point</b> : N/A	<b>Part. Coeff (n-octanol/water vapor)</b> : N/A
<b>Upper Flam Limits</b> : N/A	<b>Lower Flam Limits</b> : N/A	<b>Pressure</b> : N/A
<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

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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. Temperatures above 15000°C

**Incompatible materials**: Organic solvents

**Decomposition products**: None

## 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 Information (product):** The TDL for RAT implant is 5250 mg/kg; For implant in mice, the TDL is 23000 mg/kg platinum in this form is practically nontoxic. Platinum in this form is non-allergenic but ionic platinum halogen complexes are allergenic.

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

### Toxicological Information (contained substances)

**Carcinogenicity or mutagenicity:** suspected of causing genetic defects  
**Sensitization:** Product is not expected to be a sensitizer.

## 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:** 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:** UN3093; Corrosive liquid; oxidizing n.o.s

**IMDG:** Same as DOT. Always consult IATA manual before shipping

**IATA:** Same as DOT. Always consult IATA manual before shipping

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

**Comments:** Environmental hazard

## Section 15: Regulatory Information

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**TSCA:** This chemical is not TSCA listed/registered.

**SARA: Section 313 Notification**

This product is a fire hazard. It is reactive and poses an immediate (acuter) health hazard

**Canadian Regulatory Information:** All ingredients of this product comply with the New Substances Notification requirements of the Canadian Environmental Protection Act (CEPA).

**European Union (EU) Regulatory Information:** R36/37/38 - Irritating to eyes, respiratory system and skin  
S24/25 - Avoid contact with skin and eyes

**Section 16: Other Information**

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<u>NFPA Rating</u>	<u>HMIS Rating</u>	<u>Precautionary Label</u>
Health: 1	Health: 1	Irritant/Corrosive
Fire: 0	Fire: 0	
Reactivity: 0	Reactivity: 0	
	Personal	
	Protection: B	

**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 believed to be correct; however, you (the customer), should perform 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.

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