CMI Product #6030-S Issued 06/15/15

Safety Data Sheet 29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Tetraammineplatinum(II)Nitrate Solution

Product Code: 6030-S

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

Emergency Supplier Emergency Contacts & Phone Number

Response: Chemtrec: 800-424-9300

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



www.colonialmetals.com

Section 2: Hazards Identification



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 P261: Avoid breathing dust/fume/gas/mist/vapors/spray

Statements: 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.

Conditions Aggravated By Exposure

Hazards not otherwise classified:

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	1 - 10
Water		7732-18-5	90 - 99

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 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

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: Special hazards arising from the substance or mixture; Carbon oxides, nitrogen oxides (NOX), Potassium oxides, Hydrogen cyanide (hydrocyanic acid)

Extinguishing Use water spray or carbon dioxide. Do not use organics

Method /

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

Decomposition 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 Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all

precautions, ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate

protective protective equipment and clothing during clean-up. Avoid breathing dust/vapor. Ventilate

equipment and area if easy to do so. Contact local authorities if significant spillages cannot be contained. For personal

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.

Equipment and Neutralize with dilute alkalis solution or use soda ash or lime. Soak up with wet paper towel or rag and

Procedures: place in a sealed container for reclamation or disposal.

Collect material and dispose

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.

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Section 7: Handling and Storage

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** Store in cool, dry area in a tightly closed product container away from volatile acids.

for Storage:

Incompatibilities: Store away from strong acids or oxidizing 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

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 <u>Ingredient(s) - Exposure Limits</u>
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

State: Liquid Melting Point: N/A Freezing N/A Point:

Color: Pale Yellow Boiling pH 5-7

Point/Range: 212 °F 100 °C

Molecular Wt. 186.2 Odor: Slight odor of Water Soluble NH3 Solubility:

Evaporation rate: N/A Flash Point: N/A Part. Coeff (n· N/A

Upper Flam Limits: N/A Lower Flam N/A Vapor N/A
Limits: Pressure:

VOC Content N/A Viscosity: N/A Autoignition N/A (lbs/gal): Temp:

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 Mixing with organic reducing agents

materials:

Decomposition Ammonia and nitrous oxide (NOx) vapors.

products:

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Section 11: Toxicological Information

General No data available

Information:

Toxicological Product has not been tested. Prolonged inhalation may be harmful to human health. Irritating in case

Information of skin or eye contact. May be harmful if swallowed or in contact with skin.

(product):

Likely Routes of Eye Contact

Exposure: Skin Contact

Inhalation

Ingestion - possible, but considered unlikely.

Toxicological Information (contained substances)

Carcinogenicity or No data available

mutagenicity:

Sensitization: Product is not expected to be a sensitizer.

Other Notes: Not applicable.

Section 12: Ecological Information

General Product not tested.

information:

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

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

Section 14: Transport Information

DOT: Proper Shipping Name

Corrosive liquid, n.o.s. (contains ammonium hydroxide)

Hazard Class

8

Secondary Hazard Class

NA

DOT Identification Number

1760

DOT Shipping Label

Corrosive

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

CMI Product #6030-S Section 15: Regulatory Information

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

European Union Hazard Symbol: Xi, ES

(EU) Regulatory Indication of Danger: Irritant and Corrosive

Information:

R: 36/37/38, 43

Risk Phrase: Irritating to eyes respiratory system and skin. May cause sensitization by skin contact.

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

NFPA Rating HMIS Rating Health: 2 Health: 2 Fire: 0 Fire: 0 Reactivity: 0 Reactivity: 0 Other: COR 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.

John Kerchner SDS Author: **Version Date:** 9/17/2015

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