Section 1: Company and Product Identification

Product Name: Platinum (II) 2,4-Pentanedionate

Product Code: 6039

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

Section 2: Hazards Identification

Hazard Pictograms:

Signal Word: Warning

Hazard Category:
Acute tox, oral Cat 5
Specific target organ tox, single exp. Cat 3 (resp irrit)
Aspiration hazard Cat 2
Skin corrosion/irritation Cat 2
Serious eye damage/eye irritation Cat 2
Reproductive tox Cat 1
Sensitization, resp. Cat 1

Hazard Statements:
H303: May be harmful if swallowed
H335: May cause respiratory irritation
H305: May be harmful if swallowed and enters airways
H315: Causes skin irritation
H319: Causes serious eye irritation
H360: May damage fertility or the unborn child
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

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
P342+311: If experiencing respiratory symptoms: Call a POISON CENTER or
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
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/national/international rules.
Section 3:  Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous substance (name)</th>
<th>Hazard Category</th>
<th>CAS#</th>
<th>Weight %</th>
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<tr>
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<td>Irritant</td>
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<td>97 - 100</td>
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</table>

Chemical Name: Platinum (II) Acetylacetonate
Chemical Family: Platinum Group Metal
Chemical Formula: Pt(C5H7O2)2
Synonyms: 2,4-pentanedioneplatinum (II) derivative

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:
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:  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.
Extinguishing Method:
Carbon dioxide, appropriate foam or dry powder
Hazardous Decomposition:
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-
Info: contained breathing apparatus and full protective clothing.

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/vapors. 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 Procedures:
Personnel to be protected with full face shield and proper respirator. Collect material and dispose of

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

Safe Handling: Do not handle until all safety precautions have been read and understood. Keep containers tightly 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 product container away from sources of ignition or flame.

for Storage:

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

Other Precautions: 0.1 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. 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 Controls: Mechanical: Desirable to insure concentration of material below TLV/TWA levels

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 Protection: Where risk assessment shows air-purifying respirators are appropriate use full-face particle respirator type N95 (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 Information: None

Section 9: Physical and Chemical Properties

State: Solid

Melting Point: 480-486 °F
249-252 °C

Freezing Point: N/A

Color: Yellow

Belling Point/Range: N/A

pH: N/A

Molecular Wt. 393.31

Odor: Hydrogen Chloride odor

Water Solubility: Soluble

Evaporation rate: N/A

Flash Point: N/A

Part. Coeff (n-octanol/water): N/A

Upper Flam Limits: N/A

Lower Flam Limits: N/A

Vapor Pressure: N/A

VOC Content (lbs/gal): N/A

Specific Gravity: N/A

Autoignition Temp: 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: Oxidizing Agents

Decomposition products: Carbon oxides.
Section 11: Toxicological Information

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

Toxicological Information

- **Subchronic (Target Organ Effects)**

  - Nerves.

- **Teratogenicity (Birth Defects)**

  Possible risk of congenital malformation in the fetus. Possible risk of harm to unborn child.

**Miscellaneous Toxicological Information**

2,4-Pentanedione has the following toxicological hazards: toxic irritant, neurological hazard, teratogen, possible mutagen, target organ-thymus. In humans, 2,4-Pentanedione is reported to cause contact dermatitis and contact urticaria.

**Conditions Aggravated By Exposure**

- May cause nervous system disturbances.
- 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)**

- **Carcinogenicity:** No data available
- **Mutagenicity:** Product not tested.
- **Sensitization:** Product is not expected to be a sensitizer.

Section 12: Ecological Information

**General Information:**

No data available.

- **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 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

**DOT:** Considered Non-Hazardous for Transport.

**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:** None

Section 15: Regulatory Information

- **TSCA:** This chemical is not TSCA registered. For R&D use only.

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

- **DSL:** No
- **NDSL:** Yes
European Union (EU) Regulatory Information:

- **Indication of Danger:** Harmful
- **Risk Statement:** Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Possible risk of harm to the unborn child.
- **S:** 26/36/37/39
- **Safety Statements:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

### Section 16: Other Information

<table>
<thead>
<tr>
<th>NFPA Rating</th>
<th>HMIS Rating</th>
<th>Precautionary Label</th>
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<td>Health: 2</td>
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</tbody>
</table>

**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