Section 1: Company and Product Identification

**Product Name:** Bis(acetonitrile)(1,5-cyclooctadiene) Rhodium (I) Tetrafluoroborate

**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 Response:**
Supplier Emergency Contacts & Phone Number
Chemtrec: 800-424-9300
World Wide - Call COLLECT to U.S: 703-527-3887

Section 2: Hazards Identification

**Hazard Pictograms:**

**Signal Word:** Warning

**Hazard Category:**
- Serious eye damage/eye irritation Cat 2
- Skin corrosion/irritation Cat 2
- Acute tox, inh. Cat 5
- Specific target organ tox, single exp. Cat 3 (resp irrit)
- Acute tox, oral Cat 5

**Hazard Statements:**
- H319: Causes serious eye irritation
- H315: Causes skin irritation
- H333: May be harmful if inhaled
- H335: May cause respiratory irritation
- H303: May be harmful if swallowed

**Precautionary Statements:**
- P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel
- P317+313: If eye irritation persists get medical advice/attention
- P308+313: IF exposed or concerned: Get medical advice/attention

**Hazards not otherwise classified:**
- Conditions Aggravated By Exposure
  - May cause irritation of the respiratory system. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization.
- Conditions Aggravated By Overexposure
  - To the best of our knowledge the chemical, physical, and toxicological effects of this compound have not been thoroughly investigated.

Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous substance (name)</th>
<th>Hazard Category</th>
<th>CAS#</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis(acetonitrile)(1,5-cyclooctadiene) Rhodium (I) Tetrafluoroborate</td>
<td>Irritant</td>
<td>32679-02-0</td>
<td>&lt;100</td>
</tr>
</tbody>
</table>

**Chemical Name:** Bis(acetonitrile)(1,5-cyclooctadiene) Rhodium (I) Tetrafluoroborate

**Chemical Formula:** [(CH3CN)2(1,5-C8H12)Rh]BF4

Irritating to the eyes, respiratory system and skin
Section 4:  First Aid Measures

General Info: Dust may cause irritation of the respiratory system. Maintain housekeeping and personal hygiene to minimize

Notable Exposure symptoms:

If ingested: Never give anything by mouth to an unconscious person. Rinse mouth with water. Contact a physician or a poison control center immediately.

If inhaled: Avoid breathing dust. 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. If not breathing, give artificial respiration. Consult a physician.

Eye contact: Avoid eye contact. In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Consult a Physician.

Skin contact: Flush area for 15 minutes with water and wash with soap and water. If discomfort occurs or persists, contact a physician. Remove contaminated clothing and shoes and wash before reuse.

Section 5:  Fire Fighting Measures

General Info: Avoid breathing vapors, gases and fumes. Firefighters should wear self-contained breathing apparatus and full protective gear. Eliminate sources of ignition.

Extinguishing Method / Equipment: For small (incipient) fires, use water or other media such as alcohol-resistant foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray, solid streams of water may be ineffective.

Hazardous Decomposition Info: - Carbon oxides, nitrogen oxides

Section 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 sources of ignition. Wear appropriate respiratory protective equipment and clothing during clean-up. Avoid breathing dust. 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 and Procedures: Contain actively spilling material if safe and easy to do so. Do not let product enter drains. Mix with suitable non-combustible absorbent and sweep or soak up and place in sealed container for reclamation or disposal, taking care to avoid dusting. Ventilate area and wash spill site after pick-up is complete.

Cleanup Procedures: Contain spillage and then collect with an electrically protected vacuum cleaner or by wet brushing and place in container for disposal according to local regulations.

Section 7:  Handling and Storage

Safe Handling Precautions: Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling. Keep away from ignition sources.

Recommendations for Storage: Store in cool, dry area in a tightly closed product container under an inert atmosphere away from volatile acids and sources of ignition or flame. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Incompatibilities: Strong oxidizing agents

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

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

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

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: Utilize organic vapor respirator if airborne levels are not maintained or if ventilation is inadequate. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup 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).
Section 9: Physical and Chemical Properties

- **State:** Solid
- **Color:** Yellow
- **Molecular Wt.:** N/A
- **Odor:** N/A
- **VOC Content (lbs/gal):** N/A

### Physical Properties
- **Melting Point:** N/A
- **Freezing Point:** N/A
- **Boiling Point/Range:** N/A
- **Specific Gravity:** N/A
- **Flash Point:** N/A
- **Upper Flam Limits:** N/A
- **Lower Flam Limits:** N/A
- **Viscosity:** N/A

### Chemical Properties
- **pH:** N/A
- **Water Solubility:** N/A
- **Part. Coeff (n-octanol/water Vapor Pressure:** 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.

**Stability:** Air Sensitive (Store Cold)

**Conditions to Avoid:** Air, and Elevated Temperature

**Incompatible materials:** Strong oxidizing agents

**Decomposition:** Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides products: (NOx), Hydrogen fluoride, Borane/boron oxides, Rhodium/rhodium 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 (product):** No Data Available

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

**Toxicological Information (contained substances)**

**Carcinogenicity or IARC:** 3 - 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 IRAC.

**ACGIH:** 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 ACGIH.

**NTP:** 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 NTP.

**OSHA:** 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 OSHA.

**Sensitization:** Product is not expected to be a sensitizer.

**Other Notes:** Specific target organ toxicity – single exposure (GHS)
- Inhalation - May cause respiratory irritation.

Section 12: Ecological Information

**General information:** No data available

**Aquatic toxicity:** No data available

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

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

Section 13: Disposal Information

**Product disposal:** Place in a sealed container. Consult Federal EPA, State and local regulations for proper disposal/recycle/reclamation

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

**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: Proper Shipping Name
Bis(acetetonitrile)(1,5-cyclooctadiene) Rhodium (I) Tetrafluoroborate
Hazard Class
Not dangerous goods
Secondary Hazard Class
NA

IMO/IMDG: Same as DOT 49 CFR regulations.

IATA: Same as DOT 49 CFR regulations. Consult IATA before shipping

Section 15: Regulatory Information

TSCA: Not Listed in the TSCA

SARA 302/311/313 SARA 302 Components:
SARA 302: This material does not contain any chemical components SARA Title III, Section 302 reporting requirements.

SARA 313 Components:
SARA 313: 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

SARA 311/312 Hazards:
No Sara Hazards

Right to Know Massachusetts Right To Know Components
No Components are subject to the Massachusetts Right to Know Act

Pennsylvania Right To Know Components
Bis(acetetonitrile)(1,5-cyclooctadiene) Rhodium (I) Tetrafluoroborate, CAS #32679-02-0

New Jersey Right To Know Components
Bis(acetetonitrile)(1,5-cyclooctadiene) Rhodium (I) Tetrafluoroborate, CAS #32679-02-0

California Prop. 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

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

Other International Regulations:
None

Section 16: Other Information

NFPA Rating
Health: 2
Fire: 0
Reactivity: 0

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: 7/30/2015