

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Bis(norbornadiene) Rhodium (I) Tetrafluoroborate

Product Code: 7074

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

Chemtec: 800-424-9300
 World Wide - Call COLLECT to U.S: 703-527-3887

Section 2: Hazards Identification

GHS07

GHS05

BLANK

BLANK

Hazard Pictograms:



Signal Word: Danger

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

Hazard Statements: H318: Causes serious eye damage
 H314: Causes severe skin burns and eye damage
 H333: May be harmful if inhaled
 H335: May cause respiratory irritation
 H303: May be harmful if swallowed

Precautionary Statements: P280: Wear protective gloves/protective clothing/eye protection/face protection
 P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
 P310: Immediately call a POISON CENTER or doctor/physician

Hazards not otherwise classified: Conditions Aggravated By Exposure
 Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract
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

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Bis-(norbornadiene)-rhodium(I)-tetrafluoroborate	Corrosive/Irritant	36620-11-8	
Product Name: Bis(norbornadiene) Rhodium (I) Tetrafluoroborate Chemical Formula: C ₁₄ H ₁₆ BF ₄ Rh	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: Irritation to skin, eyes and areas of contact.

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: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital

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: In case of fire, use water spray (fog) foam, dry chemical, or CO2.

Hazardous Decomposition Info: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride,

Borane/boron oxides, Rhodium/rhodium oxides Reacts with water to form: - Hydrogen fluoride

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 ignition sources (no smoking, flares, sparks, or flames in immediate area). 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 Equipment 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: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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: Keep container tightly closed in a dry and well-ventilated place. Air and moisture sensitive. Store under inert gas. Keep in a dry place.

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

Controls: Other: Closed Ventilation system - Dust (Laboratory Fume Hood)

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: Powder Solid	Melting Point: 278.4 - 283.8 °F 136.9 - 139.9 °C	Freezing Point: N/A
Color: Red	Boiling Point/Range: N/A	pH: N/A
Molecular Wt.: 373.99 g/mol	Odor: N/A	Water Solubility: Insoluble
Specific Gravity: 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	Viscosity: 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: Exposure to moisture may affect product quality

Incompatible materials: Strong oxidizing agents

Decomposition products: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen fluoride, Borane/boron oxides, Rhodium/rhodium oxides Reacts with water to form: - Hydrogen fluoride

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): Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, shortness of breath, Headache, Nausea

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

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

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

Section 14: Transport Information

DOT: Proper Shipping Name

Corrosive solids, n.o.s. (Bis-(norbornadiene)-rhodium(I)-tetrafluoroborate)

Hazard Class

8

DOT Identification Number

1759

DOT Shipping Label

Corrosive solids, n.o.s. (Bis-(norbornadiene)-rhodium(I)-tetrafluoroborate)

Packaging Requirements

PG II

IMO/IMDG: UN number: 1759 Class: 8 Packing group: II EMS-No: F-A, S-B
Proper shipping name: CORROSIVE SOLID, N.O.S. (Bis-(norbornadiene)-rhodium(I)-tetrafluoroborate)
IATA: UN number: 1759 Class: 8 Packing group: II
Proper shipping name: Corrosive solid, n.o.s. (Bis-(norbornadiene)-rhodium(I)-tetrafluoroborate)

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:

Acute Health Hazard

Right to Know Massachusetts Right To Know Components

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

Pennsylvania Right To Know Components

Bis-(norbornadiene)-rhodium(I)-tetrafluoroborate CAS-No. 36620-11-8

New Jersey Right To Know Components

Bis-(norbornadiene)-rhodium(I)-tetrafluoroborate CAS-No. 36620-11-8

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: Class E - Corrosive Material

European Union R23/24/25 - Harmful by inhalation, in contact with skin and if swallowed

(EU) Regulatory R35 - Causes severe burns

Information: R41 - Risk of serious damage to eyes

S24/25 - Avoid contact with skin and eyes

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S27 - Take off immediately all contaminated clothing

S28 - After contact with skin, wash immediately with plenty of water

S36/37/39 - Wear suitable protective clothing, gloves, and eye/face protection

S62 - If swallowed, do not induce vomiting; seek medical advice immediately; bring container label

Section 16: Other Information

NFPA Rating

Health: 3
 Fire: 0
 Reactivity: 0
 Other: COR

HMIS Rating

Health: 3
 Fire: 0
 Reactivity: 0
 Personal
 Protection: J

Precautionary Label: Corrosive

Disclaimer: In compliance with the OSHA Hazard communication Standard, 29 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