

Safety Data Sheet

29 CFR 1910.1200

Section 1: Company and Product Identification

Product Name: Rhodium (III) Chloride Anhydrous

Product Code: 7001

CAS #: 10049-07-7

Company: Colonial Metals, Inc.

Building 20

505 Blue Ball Road

Elkton, MD 21921 United States

Company Contact: EHS Director

Telephone Number: 410-398-7200

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E-Mail : info@colonialmetals.com

Web Site: www.colonialmetals.com



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:



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Signal Word:

Warning

Corrosion

Hazard Category:

Serious eye damage/eye irritation Cat 1

Skin corrosion/irritation Cat 3

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

H316: Causes mild skin irritation

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

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.

Avoid elevated temperature. Product incompatible with Organic and chlorine, bromine, alkali hydroxides, potassium chlorate and alkaline hypochlorites. Can decompose oxides of rhodium

Section 3: Composition / Information on Ingredients

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Rhodium (III) Chloride Anhydrous	Irritant	10049-07-7	100
Product Name: Rhodium (III) Chloride Anhydrous Chemical Name: Rhodium trichloride Chemical Family: Platinum Group Metal Oxide	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.

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 immediate medical attention.

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: There is a potential for fire when rhodium is exposed to heat or flame. Rhodium will react violently with chlorine trifluoride and oxygen difluoride. Use proper safety equipment. Material is capable of creating a dust explosion. Flammable solid. Emits toxic fumes under fire conditions.

Extinguishing Method / Equipment: Use water spray, carbon dioxide, dry chemical powder or dry sand. Do not use organics.

Method / Equipment:

Hazardous Decomposition Info: Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear.

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: **Large Spills:** Contain actively spilling material if safe and easy to do so. Do not let product enter drains. 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.

Small Spills: Sweep or soak up and place in sealed container. Taking care to avoid dusting.

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 away from sources of ignition or flame. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Incompatibilities: Rhodium will react violently with chlorine trifluoride and oxygen difluoride.

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 chemical 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).

Additional Information: ACGIH TLV for Rhodium metal – 1mg/m

Section 9: Physical and Chemical Properties

State: Black	Melting Point: 842°F (450°C)	Freezing Point: N/A
Color: Gray Black	Boiling Point/Range: NA	pH: N/A
Molecular Wt.: 209.26	Odor: Odorless	Water Solubility: Insoluble
Specific Gravity: 5.38	Flash Point: N/A	Part. Coeff (n-octanol/water vapor): N/A
Upper Flam Limits: N/A	Lower Flam Limits: N/A	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: Hygroscopic. Stable under normal conditions

Conditions to Avoid: Incompatible products, Exposure to moist air or water

Incompatible materials: Strong Oxidizing agents, Halogens, Chlorine trifluoride, oxygen difluoride

Decomposition products: Hazardous decomposition products formed under fire conditions –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 mutagenicity: IARC: 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 IARC.

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: None

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.

Other considerations: No further information.

Section 14: Transport Information

DOT: UN-No: 3260

Proper Shipping Name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Hazard Class: 8

Packing Group: III

IMO/IMDG: Same as DOT 49 CFR regulations. Consult IMDG/IMO before shipping

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

Section 15: Regulatory Information

TSCA: Listed in the TSCA

SARA SARA 302 Components

302/311/312/313 This material does not contain any chemical components SARA Title III, Section 302 reporting requirements.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that are above the threshold reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

State Regulations: Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Rhodium, CAS #7440-16-6

New Jersey Right To Know Components

Rhodium, CAS #7440-16-6

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: 1

Fire: 2

Reactivity: 0

HMIS Rating

Health: 2

Fire: 0

Reactivity: 0

Personal

Protection: C

Precautionary Label: Can be irritating to eyes and skin

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: Ernest Addo, PhD

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