

## Safety Data Sheet 29 CFR 1910.1200

### Section 1: Company and Product Identification

---

**Product Name:** Palladium On Activated Carbon 10%

**Product Code:** 5030-10

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

### Section 2: Hazards Identification

---

GHS02

BLANK

BLANK

BLANK

**Hazard Pictograms:**



**Signal Word:** Danger

**Hazard Category:** Flammable Solid  
Skin corrosion/irritation Cat 2  
Serious eye damage/eye irritation Cat 2  
Acute tox, oral Cat 5  
Aspiration hazard Cat 2

**Hazard Statements:** H228: Flammable solid  
H315: Causes skin irritation  
H319: Causes serious eye irritation  
H303: May be harmful if swallowed  
H305: May be harmful if swallowed and enters airways

**Precautionary Statements:** P202: Do not handle until all safety precautions have been read and understood  
P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P264: Wash thoroughly after handling  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P308+313: IF exposed or concerned: Get medical advice/attention  
P402+404: Store in a dry place. Store in a closed container  
P501: Dispose of contents/container in accordance with local/national/international rules.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

**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:**

- 1.) No known lasting detrimental effects
- 2.) Carbon - Exposure to dust for at least 5 years has been associated with an increased incidence of pneumoconiosis and fibrofolocal pulmonary tuberculosis. These conditions are not attributed to carbon black alone; They are considered functions of the duration of exposure in a dusty environment. See animal reproductive effects reference in toxicity section.

**Section 3: Composition / Information on Ingredients**

Hazardous substance (name)	Hazard Category	CAS#	Weight %
Carbon	Flammable Solid	7440-44-0	90
Palladium		7440-05-3	10
<b>Chemical Name:</b> Palladium Supported on Carbon Catalyst	<b>Chemical Family:</b> Supported Metal Catalyst <b>Chemical Formula:</b> Pd on Carbon	<b>Synonyms:</b> Palladium Catalyst, Palladium on Charcoal.	

**Section 4: First Aid Measures**

**General Info:** Ensure proper ventilation.

**Notable Exposure symptoms:** Irritation to skin, eyes and areas of contact.

**If ingested:** If victim is conscious and not convulsive, immediately give 2 to 4 glasses of water, and induce vomiting by touching finger in back of throat. From sitting position, head must be lower than hips to prevent aspiration. Keep patient warm and at rest. Get medical attention immediately.

**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: Fire Fighting Measures**

**General Info:** Autoignition. Avoid breathing fumes from burning mater

**Extinguishing Method / Equipment:** Use water spray, dry chemical, carbon dioxide (CO<sub>2</sub>) or medium for primary source. If residue self-ignites, use CO<sub>2</sub> or dry powder extinguisher.

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

**Decomposition Info:** 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 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, avoid generating dust. Collect material and dispose

Small Spills: Sweep and collect to waste receptacles.

**Cleanup Procedures:** Collect all contaminated media, or other cleanup materials into a waste receptacle. If cleaning surface is necessary, utilize vacuum cleaner, provided adequate ventilation is available.

**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 creating or breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment and wash thoroughly after handling. 0.01 mg/m<sup>2</sup> high efficiency particulate respirator/supplied air respirator/self-contained breathing apparatus; 0.2 mg/m<sup>2</sup> same as above with full face piece; 1 mg/m<sup>3</sup> 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.

**Recommendations for Storage:** Do not store directly on ground. Store in cool, dry area in a tightly closed product container away from sources of ignition or flame.

**Incompatibilities:** Store away from strong acids or oxidizing agents. Refer to Section 10.

## Section 8: Exposure Control / Personal Protection

---

**General / Engineering Controls:** Ventilation: Local Exhaust: Required in handling area  
 Mechanical: Desirable to insure concentration of material below TLV/TWA levels  
 Other: NA

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

**Eye/face protection:** ANSI approved safety glasses/goggles (splash proof or dust-resistant) and a face shield to prevent contact with substance

**Skin Protection:** Wear chemical resistant gloves.

**Respiratory Protection:** Chemical cartridge respirator for dust/mist/fume/radionuclide, or self-contained breathing apparatus with full face shield.

**Additional Information:** Lab coat/apron, flame and chemical resistant protective clothing, eye wash, safety shower, and hygiene facilities for washing.

**Ingredient(s) - Exposure Limits**  
 Carbon  
 ACGIH (TWA) - 3.5 mg/m<sup>3</sup> (As C)  
 OSHA PEL - 3.5 mg/m<sup>3</sup> (As C)  
 Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash hands or exposed skin after using the product.

## Section 9: Physical and Chemical Properties

---

<b>State:</b> Granules	<b>Melting Point:</b> 2826 °C	<b>Specific Gravity:</b> 2.5
<b>Color:</b> Black Powder	<b>Boiling Point/Range:</b> 5864 °C	<b>pH:</b> N/A
<b>Molecular Wt.</b> 106.4/12.01	<b>Odor:</b> None	<b>Water Solubility:</b> Insoluble
<b>Evaporation rate:</b> N/A	<b>Flash Point:</b> N/A	<b>Part. Coeff (n-octanol/water):</b> N/A
<b>Upper Flam Limits:</b> N/A	<b>Lower Flam Limits:</b> N/A	<b>Vapor Pressure:</b> N/A
<b>VOC Content (lbs/gal):</b> N/A	<b>Viscosity:</b> N/A	<b>Autoignition Temp:</b> N/A

## Section 10: Stability and Reactivity

---

**General: Conditions To Avoid (Stability):** Mixtures of fine dust with air. Contact with an ignition source. Auto ignition may occur upon contact with alcohols.

**Incompatible materials:** Fatty oils or sodium sulfide can undergo spontaneous heating; nitric acid reacts violently.

**Decomposition products:** SO<sub>2</sub> & metal oxide fumes, toxic fumes, gases and carbon dioxide. Toxic substances may be released in the event of a fire.

## Section 11: Toxicological Information

---

**General Information:** No data available

**Toxicological Information (product):** Carbon: 440 mg/kg intravenous-mouse LD50: reproductive effects data (RTECS)

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

**Toxicological Information (contained substances)**

**Carcinogenicity or mutagenicity:** No data available  
**Sensitization:** Product is not expected to be a sensitizer.  
**Other Notes:** Not applicable.

**Section 12: Ecological Information**

---

**General information:** Product not tested.

**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. Burn in an incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Consult with a licensed professional waste contractor to dispose of this material.

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

**Other considerations:** No further information.

**Section 14: Transport Information**

---

**DOT:** Proper Shipping Name

Flammable solid, inorganic, n.o.s. (Palladium on Activated Carbon)

Hazard Class

4.1

DOT/UN Number

3178

Packing Group

II

**IMO/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:** All ingredients of this product are listed or are excluded from listing under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**SARA 313** This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372

**State Regulations: Massachusetts Right to Know Components:** No components are subject to Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components:** Carbon CAS-No. 7440-44-0 and Palladium CAS-No. 7440-05-3

**New Jersey Right To Know Components:** Carbon CAS-No. 7440-44-0 and Palladium CAS-No. 7440-05-3

**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:** All ingredients of this product comply with New Substances Notification requirements of the Canadian Environmental Protection Act (CEPA). 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.

**European Union (EU) Symbol of Danger:** ES, F  
**Regulatory Indication of Danger:** Flammable Solid  
**Information:** **R:** 22, 7  
**Risk Phrase:** Harmful by inhalation. May cause fires.  
**S:** 36/37/39, 22, 16  
**Safety Phrase:** Wear suitable protective clothing, gloves, and eye/face protection. Do not breathe dust. Keep away from sources of ignition - No smoking.

#### Section 16: Other Information

---

<u>NFPA Rating</u>	<u>HMIS Rating</u>	<u>Precautionary Label:</u> Flammable	Flammable Solid
Health: 1	Health: 1		
Fire: 2	Fire: 2		
Reactivity: 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:** 10/8/2015