

**Safety Data Sheet**  
29 CFR 1910.1200

**Section 1: Company and Product Identification**

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**Product Name:** Tetrakis(acetonitrile)palladium(II) tetrafluoroborate

**Product Code:** 5139

**CAS #:** 21797-13-7

**Company:** Colonial Metals, Inc.  
Building 20  
505 Blue Ball Road  
Elkton, MD 21921 United States  
Company Contact: EHS Director  
Telephone Number: 410-398-7200  
FAX Number: 410-398-2918  
E-Mail : info@colonialmetals.com  
Web Site: www.colonialmetals.com



www.colonialmetals.com

**Emergency Response:** For Hazardous Materials [or Dangerous Goods] Incident  
Spill, Leak, Fire, Exposure, or Accident  
Call CHEMTREC  
+1 703-741-5970 / 1-800-424-9300 CCN 5252

**Section 2: Hazards Identification**

GHS07

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**Hazard Pictograms:**



**Signal Word:** Warning

**Hazard Category:** Skin corrosion/irritation Cat 3  
Serious eye damage/eye irritation Cat 3  
Acute tox, inh. Cat 4  
Acute tox, oral Cat 5

**Hazard Statements:** H316: Causes mild skin irritation  
H320: Causes eye irritation  
H332: Harmful if inhaled  
H303: May be harmful if swallowed

**Precautionary Statements:** P202: Do not handle until all safety precautions have been read and understood  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
P264: Wash thoroughly after handling  
P271: Use only outdoors or in a well-ventilated area  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
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  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove  
P312: Call a POISON CENTER or doctor/physician if you feel unwell  
P321: Specific treatment (see ... on this label)  
P332+313: If skin irritation occurs: Get medical advice/attention  
P337+313: If eye irritation persists get medical advice/attention  
P362: Take off contaminated clothing and wash before reuse  
P403+233: Store in a well ventilated place. Keep container tightly closed

**Hazards not  
otherwise classified:**

P405: Store locked up

P501: Dispose of contents/container in accordance with local/national/international rules.

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 %
Tetrakis(acetonitrile)palladium(II) tetrafluoroborate	Acute Tox. 4; H332	21797-13-7	90- 100
<b>Chemical Family:</b> Organometallic Fluoro Complex <b>Chemical Formula:</b> C <sub>8</sub> H <sub>12</sub> B <sub>2</sub> F <sub>8</sub> N <sub>4</sub> Pd			

**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. Hydrofluoric (HF) acid burns require immediate and specialized first aid and medical treatment. Symptoms may be delayed up to 24 hours depending on the concentration of HF. After decontamination with water, further damage can occur due to penetration/absorption of the fluoride ion. Treatment should be directed toward binding the fluoride ion as well as the effects of exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel repeated until burning ceases. More serious skin exposures may require subcutaneous calcium gluconate except for digital areas unless the physician is experienced in this technique, due to the potential for tissue injury from increased pressure. Absorption can readily occur through the subungual areas and should be considered when undergoing decontamination. Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets or Milk of Magnesia to conscious victims. Conditions such as hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored for, since they can occur after exposure.

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

**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 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:** Product is not flammable

**Extinguishing Method / Equipment:** In case of fire, use water fog, dry chemical, CO<sub>2</sub>, or alcohol-resistant foam.

**Hazardous Decomposition Info:**

Constituents associated with burning / combustion are to be considered toxic. Firefighters should wear self-contained breathing apparatus and full protective gear. Carbon oxides, Oxides of phosphorus, Hydrogen chloride gas, Iron 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 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** Large Spills: Contain actively spilling material if safe and easy to do so, avoid generating dust.  
**Equipment and Procedures:** 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**

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**Safe Handling** Do not handle until all safety precautions have been read and understood. Keep containers tightly closed. Ensure adequate ventilation. Avoid formation of dust and aerosols. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment such as self contained breathing apparatus for fire fighting if necessary and wash thoroughly after handling.

**Recommendations for Storage:** Store in cool, dry area in a tightly closed product container under an inert atmosphere away from sources of ignition or flame. Air and moisture sensitive. Store under inert gas.

**Incompatibilities:** Air and moisture sensitive. Heat and light sensitive

**Section 8: Exposure Control / Personal Protection**

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**General / Engineering Controls:** Use with adequate local and general exhaust ventilation.

**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:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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:** 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**

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<b>State:</b> Solid	<b>Melting Point:</b> 230 °C (446 °F)	<b>Freezing Point:</b> N/A
<b>Color:</b> N/A	<b>Boiling Point/Range:</b> N/A	<b>pH:</b> N/A
<b>Molecular Wt.</b> 444.24 g/mol	<b>Odor:</b> N/A	<b>Water Solubility:</b> N/A
<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**

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**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:** Strong oxidizing agents, Strong acids

**Decomposition products:** Carbon oxides, Hydrogen fluoride, Borane/boron oxides

### Section 11: Toxicological Information

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**Toxicological Information (product):** Product has not been tested. Prolonged inhalation may be harmful to human health. Irritating in case of skin or eye contact. May be harmful if swallowed or in contact with skin.

**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:** No Data Available.  
**Other Notes:** Not applicable.

### Section 12: Ecological Information

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**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

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**Product disposal:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

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

**Other considerations:** 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

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**DOT:** Non-Hazardous/Not dangerous goods

**IMO/IMDG:** Non-Hazardous/Not dangerous goods

**IATA:** See regulation for information

**OTHER:** Inquire for further transport information.

**Comments:** Non-Hazardous for shipping

### Section 15: Regulatory Information

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**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 Hazard Classes:** Non-Hazardous

**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

**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.

**European Union (EU) Symbol of Danger:** Xi  
**Regulatory Indication of Danger:** Irritant.  
**Information:** R 36/37/38: Irritating to eyes, respiratory system and skin.  
 S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### **Section 16: Other Information**

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**NFPA Rating**

Health: 2  
 Fire: 0  
 Reactivity: 0

**HMIS Rating**

Health: 2  
 Fire: 0  
 Reactivity: 0  
 Personal  
 Protection: c

**Precautionary Label:**

**Acute Tox. Acute toxicity**  
**H332 Harmful if inhaled.**

*Disclaimer: In compliance with the OSHA Hazard communication Standard, 2.9 C.F.R 1910.1200, we are providing you with a Safety Data Sheet (SDS) 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 representation as to the accuracy of the information in the SDS. 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 SDS to your customer.*

*Colonial Metals, Inc.*

**SDS Author:** Colonial Metals Inc. - An Ames Goldsmith Company

**Version Date:**

6/4/2019