


Palladium (II) Cyanide

Ru	Rh	Pd	Ag	Re	Os	Ir	Pt	Au
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NFPA 	HMIS <table border="1"> <tr> <td style="background-color: #00B0F0;">HEALTH</td> <td style="text-align: center;">3</td> </tr> <tr> <td style="background-color: #FF0000;">FLAMMABILITY</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">REACTIVITY</td> <td style="text-align: center;">1</td> </tr> <tr> <td>PERSONAL PROTECTION</td> <td style="text-align: center;">J</td> </tr> </table>	HEALTH	3	FLAMMABILITY	0	REACTIVITY	1	PERSONAL PROTECTION	J
HEALTH	3								
FLAMMABILITY	0								
REACTIVITY	1								
PERSONAL PROTECTION	J								

1. Product And Company Identification

Supplier Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States Company Contact: Wayne Sher Telephone Number: 410-398-7200 FAX Number: 410-398-2918 E-Mail: wsher@colonialmetals.com Web Site: colonialmetals.com	Manufacturer Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States Company Contact: Wayne Sher Telephone Number: 410-398-7200 FAX Number: 410-398-2918 E-Mail: wsher@colonialmetals.com Web Site: colonialmetals.com
Supplier Emergency Contacts & Phone Number Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887	Manufacturer Emergency Contacts & Phone Number Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887

Issue Date: 11/24/2010

Product Name: Palladium (II) Cyanide
Chemical Name: Palladium (III) Cyanide, Palladium Cyanide
CAS Number: 2035-66-7
Chemical Family: Platinum Group Metal Salts
Chemical Formula: Pd (CN)₂
MSDS Number: 5008
Product Code: 5008

2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Palladium (II) Cyanide	2035-66-7	99.9

EMERGENCY OVERVIEW

To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated. Avoid elevated temperature. Product incompatible with strong oxidizers, such as nitrates or chlorates, acids and acid salts. May decompose poisonous hydrogen cyanide gas at high temperature. Heating may cause explosion. Very toxic. Dangerous to the environment.

Palladium (II) Cyanide

Ru Rh Pd Ag Re Os Ir Pt Au

3. Hazards Identification**Primary Routes(s) Of Entry**

Inhalation: Likely
Skin: Likely
Ingestion: Likely

Eye Hazards

Irritation

Skin Hazards

Irritation, rash or itching. Dangerous if absorbed through the skin.

Ingestion Hazards

Poisonous, obtain medical attention immediately.

Inhalation Hazards

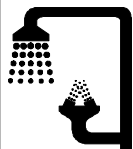
Irritation of the upper respiratory tract and mucous membranes.

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

Non-volatile salts of cyanide appear to be relatively non toxic systematically, unless they are ingested and care is taken to prevent the formation of hydrocyanic acid. Exposure to small amounts of cyanide compounds for prolonged periods can cause loss of appetite, headache, weakness, nausea and dizziness.

First Aid (Pictograms)**4. First Aid Measures****Eye**

Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician immediately.

Skin

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

Ingestion

Not expected to be a problem in industry. However if swallowed DO NOT induce vomiting, contact a physician immediately.

Inhalation

Remove to fresh air immediately. If victim is not breathing perform artificial respiration. Keep victim warm. Contact a physician immediately.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point Method: NA
Flammability Class: NA

Fire And Explosion Hazards
 Use proper safety equipment. Can decompose to emit poisonous hydrogen cyanide gas which burns easily and may explode.

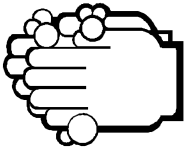
Extinguishing Media
 Product is not flammable, use media to fight surrounding fire.

Fire Fighting Instructions
 Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

Sweep or soak up and place in a sealed container. Person protected with full face shield and proper respirator for dust/mist/fume/radionuclide. Ensure adequate ventilation.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions
 Avoid contact with eyes, prolonged or repeated contact with skin. Avoid breathing dust. Use compatible chemical-resistant gloves. Wash hands thoroughly after handling.

Handling Precautions
 Ensure good ventilation. Wear proper personal protective equipment.

Storage Precautions
 Keep in a tightly sealed container in a cool, dry place away from acids.

Work/Hygienic Practices
 Always use good personal hygiene after handling.

Other Precautions
 0.01 mg/m² high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 mg/m² same as above with full face piece; 1 mg/m³ 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.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls

Ventilation: Local Exhaust: Required in handling area
 Mechanical: Desirable to insure concentration of material below TLV/TWA levels
 Other: Yes, as cyanide - exposure is 5 mg/m³, skin
 Safety shower and eyewash

Eye/Face Protection

ANSI approved safety glasses/goggles

Skin Protection

Rubber/Neoprene (use compatible chemical-resistant impervious gloves).

Respiratory Protection

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

Other/General Protection

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

9. Physical And Chemical Properties

Appearance

Yellowish-white crystalline powder.

Chemical Type: Mixture
Physical State: Solid
Melting Point: 932 °F 500 °C
Boiling Point: NA °C
Specific Gravity: NE
Molecular Weight: 158.4
Vapor Pressure: NA
Vapor Density: NA
pH Factor: NA
Solubility: Insoluble
Evaporation Rate: NA

10. Stability And Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur

Conditions To Avoid (Stability)

Elevated temperature

Palladium (II) Cyanide**Ru Rh Pd Ag Re Os Ir Pt Au****10. Stability And Reactivity - Continued****Incompatible Materials**

Strong oxidizers, such as nitrates or chlorates, acids and acids salts.

Hazardous Decomposition Products

Poisonous hydrogen cyanide gas at high temperature, nitrogen oxides, carbon monoxide, carbon dioxide
Danger of explosion.

11. Toxicological Information

Hydrocyanic acid gas is highly toxic via oral, dermal and inhalation. It inhibits tissue oxidation and causes death by asphyxia. In acute cases, death is extremely rapid.

Ecological (Pictograms)**12. Ecological Information**

Very toxic to fish.

13. Disposal Considerations

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.

14. Transport Information**Proper Shipping Name**

Cyanides, Inorganic, Solid, N.O.S.

Hazard Class

6.1

DOT Identification Number

UN1588

Packaging Requirements

PG II

IATA: Always check IATA regulations before shipping.

15. Regulatory Information**U.S. Regulatory Information**

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 Section 313 Notification

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.



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15. Regulatory Information - Continued

Canadian Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS ALDRICH - 398292 www.sigma-aldrich.com Page 4 contains all the information required by the CPR.

DSL: No
NDSL: Yes

European Union (EU) Regulatory Information

Symbol of Danger: T+-N
Indication of Danger: Very toxic. Dangerous for the environment.
R: 26/27/28-32-50/53
Risk Statements: Very toxic by inhalation, in contact with skin and if swallowed. Contact with acids liberates very toxic gas. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S: 7-28-29-45-60-61
Safety Statements: Keep container tightly closed. After contact with skin, wash immediately with plenty of water. Do not empty into drains. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

DSCL - Europe (Pictograms)



16. Other Information

NFPA Rating

Health: 3
Fire: 0
Reactivity: 1
Other: TOX

HMIS Rating

Health: 3
Fire: 0
Reactivity: 1
Personal Protection: J

Revision/Preparer Information

MSDS Preparer: Wayne Sher
MSDS Preparer Phone Number: 410-398-7200
This MSDS Supersedes A Previous MSDS Dated: 03/15/1998

MATERIAL SAFETY DATA SHEET



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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 believed to be correct; however, you (the customer), should perform 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.

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