


# MATERIAL SAFETY DATA SHEET

## Palladium (II) Sulfate Hydrate

<b>NFPA</b> 	<b>HMIS</b> <table border="1"><tr><td>HEALTH</td><td style="text-align: center;">1</td></tr><tr><td>FLAMMABILITY</td><td style="text-align: center;">0</td></tr><tr><td>REACTIVITY</td><td style="text-align: center;">1</td></tr><tr><td>PERSONAL PROTECTION</td><td style="text-align: center;">C</td></tr></table>	HEALTH	1	FLAMMABILITY	0	REACTIVITY	1	PERSONAL PROTECTION	C
HEALTH	1								
FLAMMABILITY	0								
REACTIVITY	1								
PERSONAL PROTECTION	C								

### 1. Product And Company Identification

**Supplier**

Colonial Metals, Inc.  
Building 20  
505 Blue Ball Road  
Elkton, MD 21921 United States

**Company Contact:** Joseph Fittos III  
**Telephone Number:** 410-398-7200  
**FAX Number:** 410-398-2918  
**E-Mail:** jfittos@colonialmetals.com  
**Web Site:** colonialmetals.com

**Manufacturer**

Colonial Metals, Inc.  
Building 20  
505 Blue Ball Road  
Elkton, MD 21921 United States

**Company Contact:** Joseph Fittos III  
**Telephone Number:** 410-398-7200  
**FAX Number:** 410-398-2918  
**E-Mail:** jfittos@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:** 03/26/2008

**Product Name:** Palladium (II) Sulfate Hydrate  
**Chemical Name:** Palladium Sulfate/Palladous sulfate  
**CAS Number:** 13566-03-5  
**Chemical Family:** Platinum Group Metal Salts  
**Chemical Formula:** PdSO<sub>4</sub>.2H<sub>2</sub>O  
**MSDS Number:** 5006  
**Product Code:** 5006

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Palladium (II) Sulfate	13566-03-5	84

### EMERGENCY OVERVIEW

To the best of our knowledge the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated. Avoid elevated temperatures. Product incompatible with reducing agents, humidity and hot water. May decompose sulfur dioxide, sulfur trioxide vapors, and sulfuric acid.

### 3. Hazards Identification

**Primary Routes(s) Of Entry**

Eyes: Likely  
Inhalation: Likely  
Skin: Likely  
Ingestion: Likely

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### 3. Hazards Identification - Continued

#### Eye Hazards

Irritation

#### Skin Hazards

Irritation

#### Ingestion Hazards

Irritation

Does not cause toxic manifestations.

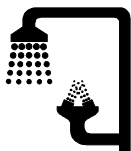
#### Inhalation Hazards

Irritating to mucous membranes and upper respiratory tract.

#### Conditions Aggravated By Exposure

May cause irritation of the respiratory system. Maintain housekeeping and personal hygiene to minimize exposure and prevent sensitization.

### 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

Immediately wash affected area with soap and water and rinse thoroughly. If discomfort occurs or persists, contact a physician immediately. Remove contaminated clothing and shoes and wash before reuse.

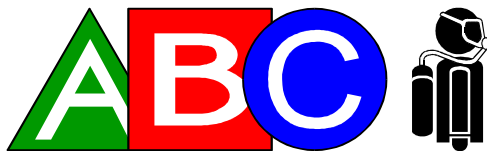
#### Ingestion

Contact a physician immediately.

#### Inhalation

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

### Fire Fighting (Pictograms)



### 5. Fire Fighting Measures

**Flash Point:** NA °C

**Autoignition Point:** NA °C

**Flammability Class:** NA

#### Fire And Explosion Hazards

Use proper safety equipment. Can decompose to emit toxic sulfur oxides.

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## Palladium (II) Sulfate Hydrate

### 5. Fire Fighting Measures - Continued

#### Extinguishing Media

Product is not flammable so use suitable measures to fight surrounding fire.

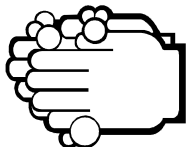
#### Fire Fighting Instructions

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

### 6. Accidental Release Measures

Sweep or soak up and place in sealed container. Person protected with full face shield and NIOSH approved respirator and cartridge for dust/mist/fume, rubber/neoprene gloves and rubber apron.

### Handling & Storage (Pictograms)



### 7. Handling And Storage

#### Handling Precautions

Avoid contact with eyes, prolonged or repeated contact with skin. Avoid breathing dust. Use compatible chemical-resistant gloves.

#### Storage Precautions

Store in a tightly sealed container in a cool, dry place away from oxidizing agents, acids, alkalis, and water.

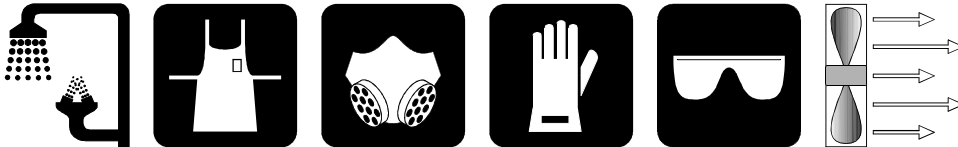
#### Work/Hygienic Practices

Always use good personal hygiene after handling.

#### Other Precautions

0.01 ppm high efficiency particular respirator/supplied air respirator/self-contained breathing apparatus; 0.2 ppm same as above with full face piece; 1 ppm 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: NA

Safety shower and eyewash

#### Eye/Face Protection

ANSI approved safety glasses/goggles, full face shield

#### Skin Protection

Rubber/Neoprene (use compatible chemical-resistant gloves)

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### 8. Exposure Controls/Personal Protection - Continued

#### Respiratory Protection

NIOSH approved chemical cartridge respirator for dust/mist/fume/radionuclide or self-contained breathing apparatus with full face piece.

#### 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

Red brown deliquescent crystals

#### Odor

Odorless

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** Decomposes °C

**Boiling Point:** NA °C

**Specific Gravity:** 1.40

**Molecular Weight:** 238.5

**Solubility:** slightly soluble

### 10. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

#### Conditions To Avoid (Stability)

Elevated temperature

#### Incompatible Materials

Oxidizing agents, water/moisture, acids, bases, hydrocarbons.

#### Hazardous Decomposition Products

Metal oxide fume and sulfur oxides.

### 11. Toxicological Information

To the best of our knowledge the chemical, physical, and toxicological properties of this compound have not been thoroughly investigated.

### 12. Ecological Information

No Data Available...

### 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.

#### RCRA Information

NL

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### 14. Transport Information

#### Proper Shipping Name

None

#### Additional Shipping Paper Description

None. Always consult IATA manual before shipping.

### 15. Regulatory Information

No Data Available...

### 16. Other Information

#### NFPA Rating

Health: 1

Fire: 0

Reactivity: 1

#### HMIS Rating

Health: 1

Fire: 0

Reactivity: 1

Personal Protection: C

#### Revision/Preparer Information

MSDS Preparer: Joseph J. Fittos III

MSDS Preparer Phone Number: 410-398-7200

This MSDS Supercedes A Previous MSDS Dated: 03/26/2001

### 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.