


# MATERIAL SAFETY DATA SHEET

## trans-diamminedichloro Platinum (II)

<b>NFPA</b> 	<b>HMIS</b> <table border="1"><tr><td>HEALTH</td><td style="text-align: center;">2</td></tr><tr><td>FLAMMABILITY</td><td style="text-align: center;">0</td></tr><tr><td>REACTIVITY</td><td style="text-align: center;">0</td></tr><tr><td>PERSONAL PROTECTION</td><td style="text-align: center;">J</td></tr></table>	HEALTH	2	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	2								
FLAMMABILITY	0								
REACTIVITY	0								
PERSONAL PROTECTION	J								

### 1. Product And Company Identification

<b>Supplier</b> 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	<b>Manufacturer</b> 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
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<b>Supplier Emergency Contacts &amp; Phone Number</b> Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887	<b>Manufacturer Emergency Contacts &amp; Phone Number</b> Chemtrac: 800-424-9300 World Wide - Call COLLECT to U.S: 703-527-3887
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**Issue Date:** 03/17/2008

**Product Name:** trans-diamminedichloro Platinum (II)  
**Chemical Name:** Trans-platinum (II) Diammine  
**CAS Number:** 14913-33-8  
**Chemical Formula:** (NH<sub>3</sub>)<sub>2</sub>PtCl<sub>2</sub>  
**MSDS Number:** 6013  
**Product Code:** 6013

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
trans-diamminedichloro Platinum (II)	14913-33-8	

### EMERGENCY OVERVIEW

**Irritant.**  
**Risk of serious damage to eyes.**  
**Toxic by inhalation, in contact with skin, and if swallowed. Limited evidence of the carcinogenic effect.**  
**May cause sensitization by inhalation and skin contact.**  
**Target organs: Liver, kidneys.**

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## trans-diamminedichloro Platinum (II)

### Hazards Identification (Pictograms)



### 3. Hazards Identification

#### Primary Routes(s) Of Entry

Eye: Likely  
Inhalation: Likely  
Skin: Likely  
Ingestion: Likely

#### Eye Hazards

Severe eye irritation.

#### Skin Hazards

Irritation, may be harmful if absorbed through skin.

#### Ingestion Hazards

May be harmful if swallowed.

#### Inhalation Hazards

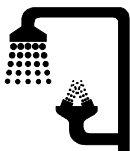
Irritation to mucous membranes, upper respiratory tract, may be harmful if inhaled.

#### Conditions Aggravated By Overexposure

Prolonged exposure can cause damage to the liver and kidneys.

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

### 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 with soap and copious amounts of water. If discomfort occurs or persists, contact a physician immediately. Remove contaminated clothing and shoes and wash before reuse.

#### Ingestion

Wash out mouth with water provided the victim is conscious. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

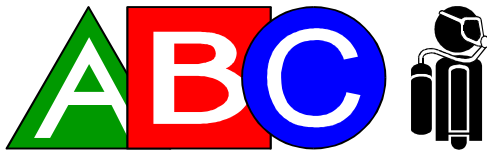
#### Inhalation

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

# MATERIAL SAFETY DATA SHEET

## trans-diamminedichloro Platinum (II)

### Fire Fighting (Pictograms)



### 5. Fire Fighting Measures

**Flash Point Method:** NA

**Autoignition Point:** NA °C

**Flammability Class:** NA

#### Fire And Explosion Hazards

Use proper safety equipment. Emits toxic fumes under fire conditions.

#### Extinguishing Media

Suitable: water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

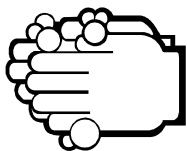
#### Fire Fighting Instructions

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

### 6. Accidental Release Measures

Sweep up and place in sealed container. Avoid raising dust. Ventilate area and wash spill site after pickup is complete.

### Handling & Storage (Pictograms)



### 7. Handling And Storage

#### Handling Precautions

Avoid contact and inhalation. Do not use with exposed skin containing scratches or cuts. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

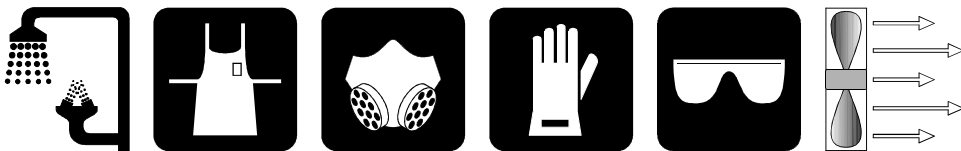
#### Storage Precautions

Keep in a tightly closed container.

#### Work/Hygienic Practices

Always use good personal hygiene after handling.

### Protective Clothing (Pictograms)



### 8. Exposure Controls/Personal Protection

#### Engineering Controls

Use only in a chemical fume hood. Safety shower and eyewash.

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## trans-diamminedichloro Platinum (II)

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

#### Eye/Face Protection

ANSI approved safety glasses/goggles

#### Skin Protection

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

#### Respiratory Protection

NIOSH approved chemical cartridge respirator for particulates and acid gas 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

Yellow powder or crystals

#### Odor

odorless

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** 340 °C

**Molecular Weight:** 300.06

### 10. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

#### Incompatible Materials

Strong oxidizing agents

#### Hazardous Decomposition Products

Nitrogen oxides, hydrogen chloride gas, platinum oxide.

### 11. Toxicological Information

#### Subchronic (Target Organ Effects)

Liver. Kidneys. Skin. Female reproductive system, uterus. Bones.

#### Chronic/Carcinogenicity

Mouse

Intraperitoneal

dose: 32408 ug/kg

exposure time: 10 w

Frequency: 1

Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, thorax, or respiration: tumors.

#### Mutagenicity (Genetic Effects)

Species: Human

Dose: 50 UMOL/L

Cell Type: lymphocyte

Mutation test: Micronucleus test

Species: Human

Dose: 50 UMOL/L

# MATERIAL SAFETY DATA SHEET

## trans-diamminedichloro Platinum (II)

### 11. Toxicological Information - Continued

#### **Mutagenicity (Genetic Effects) - Continued**

Exposure Time: 4H  
Cell Type: fibroblast  
Mutation test: DNA damage

Species: Human  
Dose: 100 UMOL/L  
SIGMA - P1525 [www.sigma-aldrich.com](http://www.sigma-aldrich.com) Page 4  
Cell Type: lung  
Mutation test: DNA damage

Species: Human  
Dose: 5 UMOL/L  
Cell Type: HeLa cell  
Mutation test: DNA damage

Species: Human  
Dose: 5 UMOL/L  
Cell Type: HeLa cell  
Mutation test: Other mutation test systems

Species: Human  
Dose: 20 MG/L  
Cell Type: Other cell types  
Mutation test: DNA damage

Species: Mouse  
Dose: 10 UMOL/L  
Cell Type: fibroblast  
Mutation test: DNA damage

Species: Mouse  
Dose: 10 UMOL/L  
Cell Type: leukocyte  
Mutation test: DNA damage

Species: Mouse  
Dose: 5 MG/L  
Cell Type: Other cell types  
Mutation test: DNA inhibition

Species: Hamster  
Dose: 10 UMOL/L  
Exposure Time: 2H  
Cell Type: fibroblast  
Mutation test: Morphological transformation.

Species: Hamster  
Dose: 320 UMOL/L  
Exposure Time: 2H  
Cell Type: lung  
Mutation test: DNA damage

Species: Hamster  
Dose: 250 UMOL/L  
Cell Type: lung

# MATERIAL SAFETY DATA SHEET

## trans-diamminedichloro Platinum (II)

### 11. Toxicological Information - Continued

#### Mutagenicity (Genetic Effects) - Continued

Mutation test: Sister chromatid exchange

Species: Hamster

Dose: 100 MG/L

Cell Type: lung

Mutation test: Mutation in mammalian somatic cells.

Species: Hamster

Dose: 34 UMOL/L

Cell Type: ovary

Mutation test: Mutation in mammalian somatic cells.

Species: Mammal

Dose: 50 UMOL/

Cell Type: lymphocyte

Mutation test: DNA L

#### Miscellaneous Toxicological Information

Oral

Rat

> 5110 mg/kg

LD50

Intraperitoneal

Mouse

27 mg/kg

LD50

Irritation data:

Skin

Rabbit: no irritation effect

Eyes

Rabbit: severe irritation effect

### 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.

### 14. Transport Information

#### Proper Shipping Name

Non-hazardous for transport.

#### Additional Shipping Paper Description

Same as DOT. Always consult IATA manual before shipping.

### 15. Regulatory Information

No Data Available...

# MATERIAL SAFETY DATA SHEET

## trans-diamminedichloro Platinum (II)

### 15. Regulatory Information - Continued

#### Canadian Regulatory Information

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.

DSL: No

NDSL: No

#### European Union (EU) Regulatory Information

Symbol of Danger: Xi

Indication of Danger: Irritant.

R: 41

Risk Statements: Risk of serious damage to eyes.

S: 26-39

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

#### DSCL - Europe (Pictograms)



### 16. Other Information

#### NFPA Rating

Health: 2

Fire: 0

Reactivity: 0

#### HMIS Rating

Health: 2

Fire: 0

Reactivity: 0

Personal Protection: J

#### Revision/Preparer Information

MSDS Preparer: Joseph J. Fittos III

MSDS Preparer Phone Number: 410-398-7200

#### Other (Pictograms)



#### 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.

# **MATERIAL SAFETY DATA SHEET**

## **trans-diamminedichloro Platinum (II)**

### **Disclaimer - Continued**

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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