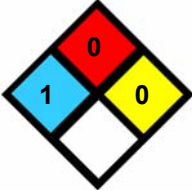


# MATERIAL SAFETY DATA SHEET

## Silver (I) Cyanate

<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;">0</td></tr><tr><td>PERSONAL PROTECTION</td><td style="text-align: center;">J</td></tr></table>	HEALTH	1	FLAMMABILITY	0	REACTIVITY	0	PERSONAL PROTECTION	J
HEALTH	1								
FLAMMABILITY	0								
REACTIVITY	0								
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: Joseph Fittos III  
Telephone Number: 410-398-7200  
FAX Number: 410-398-2918  
E-Mail: [jfittos@colonialmetals.com](mailto:jfittos@colonialmetals.com)  
Web Site: [colonialmetals.com](http://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](mailto:jfittos@colonialmetals.com)  
Web Site: [colonialmetals.com](http://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: 05/08/2007

Product Name: Silver (I) Cyanate  
Chemical Name: Cyanic Acid, Silver Salt  
CAS Number: 3315-16-0  
Chemical Family: Organometallic Group Metal  
Chemical Formula: AgOCN  
MSDS Number: 9019  
Product Code: 9019

**Synonyms**

Cyanic acid, silver (1+) salt

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Silver Cyanate	3315-16-0	98 - 100

### EMERGENCY OVERVIEW

Appearance: off-white to gray. Light sensitive. **Warning!** Causes eye and skin irritation. May cause respiratory and digestive tract irritation.  
**Target Organs:** No data found

# MATERIAL SAFETY DATA SHEET

## Silver (I) Cyanate

### Hazards Identification (Pictograms)



### 3. Hazards Identification

#### Primary Routes(s) Of Entry

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

#### Eye Hazards

Causes eye irritation. May cause chemical conjunctivitis.

#### Skin Hazards

Causes skin irritation.

#### Ingestion Hazards

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of silver compounds may cause abdominal pain, rigidity, convulsions and shock.

#### Inhalation Hazards

Causes chemical burns to the respiratory tract. May cause respiratory tract irritation. Can produce delayed pulmonary edema.

#### Subchronic (Target Organ Effects)

None

#### Chronic/Carcinogenicity Effects

Chronic effects may be delayed. May cause argyria (a slate gray or bluish discoloration of the skin and deep tissues due to the deposit of insoluble albuminate of silver).

#### Conditions Aggravated By Exposure

May cause argyria (a slate-gray or bluish discoloration of the skin and deep tissues due to the deposit of insoluble albuminate of silver).

#### Conditions Aggravated By Overexposure

To the best of our knowledge, the chemical, the physical, and toxicological properties 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.

# MATERIAL SAFETY DATA SHEET

## Silver (I) Cyanate

### 4. First Aid Measures - Continued

#### Skin

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

#### Ingestion

Not expected to be a problem in industry. However if swallowed and discomfort occurs, contact a physician.

#### Inhalation

Remove to fresh air immediately. If discomfort occurs or persists, contact a physician.

### 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 toxic fumes under fire conditions

#### Extinguishing Media

Use 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

Evacuate area. Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Sweep up and place in a sealed container. Avoid raising dust. Ventilate area and wash spill site after pick up is complete.

### Handling & Storage (Pictograms)



### 7. Handling And Storage

#### Handling And Storage Precautions

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

#### Handling Precautions

Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Store protected from light.

#### Storage Precautions

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from light.

# MATERIAL SAFETY DATA SHEET

## Silver (I) Cyanate

### 7. Handling And Storage - Continued

#### Work/Hygienic Practices

Use good personal hygiene. Wash thoroughly after handling. Wash thoroughly with soap and water after handling. Keep tightly sealed and protect from light.

#### Protective Clothing (Pictograms)



### 8. Exposure Controls/Personal Protection

#### Engineering Controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### Eye/Face Protection

ANSI approved safety glasses/goggles

#### Skin Protection

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

#### Respiratory Protection

Government approved respirator

#### 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

Faintly brown solid

**Chemical Type: Mixture**

**Physical State: Solid**

**Specific Gravity: 4.0**

**Molecular Weight: 149.89**

### 10. Stability And Reactivity

**Stability: Stable**

**Hazardous Polymerization: Will not occur**

#### Conditions To Avoid (Stability)

Incompatible materials, light, dust generation, excess heat.

#### Incompatible Materials

Strong oxidizing agents, strong acids.

#### Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, nitrogen oxides.

# MATERIAL SAFETY DATA SHEET

## Silver (I) Cyanate

### 10. Stability And Reactivity - Continued

#### Conditions To Avoid (Polymerization)

Has not been reported.

### 11. Toxicological Information

No Data Available...

### 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

#### Additional Shipping Paper Description

IATA: Same as DOT CFR 49 regulations. Non-hazardous for shipping.

### 15. Regulatory Information

#### U.S. Regulatory Information

This product is TSCA listed.

#### SARA Section 313 Notification

This material contains Silver cyanate (listed as \*\* undefined \*\*), 98%, (CAS# 3315-16-0) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

#### 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.

#### European Union (EU) Regulatory Information

##### **Hazard Symbols:**

XI

##### **Risk Phrases:**

R 36/38 Irritating to eyes and skin.

##### **Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 7/8 Keep container tightly closed and dry.

S 28A After contact with skin, wash immediately with plenty of water.

#### Other International Regulations

CAS# 3315-16-0 (listed as \*\* undefined \*\*): OEL-AUSTRALIA:TWA 0.1 mg/m<sup>3</sup>  
3 OEL-BELGIUM:TWA 0.1 mg/m<sup>3</sup> OEL-DENMARK:TWA 0.01 mg/m<sup>3</sup> OEL-FINLAND:

# MATERIAL SAFETY DATA SHEET

## Silver (I) Cyanate

### 15. Regulatory Information - Continued

#### Other International Regulations - Continued

TWA 0.1 mg/m<sup>3</sup> OEL-FRANCE:TWA 0.1 mg/m<sup>3</sup> OEL-GERMANY:TWA 0.01 mg/m<sup>3</sup>  
O  
EL-RUSSIA:STEL 1 mg/m<sup>3</sup> OEL-SWITZERLAND:TWA 0.01 mg/m<sup>3</sup> OEL-UNITED  
KIN  
GDOM:TWA 0.1 mg/m<sup>3</sup> OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check  
ACG  
IH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

#### DSCL - Europe (Pictograms)



### 16. Other Information

#### NFPA Rating

Health: 1

Fire: 0

Reactivity: 0

#### HMIS Rating

Health: 1

Fire: 0

Reactivity: 0

Personal Protection: J

#### Revision/Preparer Information

MSDS Preparer: Joseph Fittos, III

MSDS Preparer Phone Number: 410-398-7200

This MSDS Supercedes A Previous MSDS Dated: 05/26/2005

#### Disclaimer

In compliance with the OSHA Hazard Communication Standard, 29 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.**