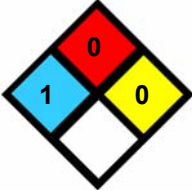


MATERIAL SAFETY DATA SHEET

Silver (I) Cyanate

| | | | | | | | | | |
|---|---|--------|---|--------------|---|------------|---|---------------------|---|
| NFPA | HMIS | | | | | | | | |
|  | <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 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: 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.

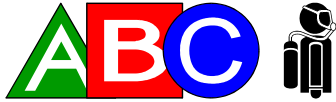
Ingestion

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/m³
3 OEL-BELGIUM:TWA 0.1 mg/m³ OEL-DENMARK:TWA 0.01 mg/m³ OEL-FINLAND:

MATERIAL SAFETY DATA SHEET

Silver (I) Cyanate

15. Regulatory Information - Continued

Other International Regulations - Continued

TWA 0.1 mg/m³ OEL-FRANCE:TWA 0.1 mg/m³ OEL-GERMANY:TWA 0.01 mg/m³
O
EL-RUSSIA:STEL 1 mg/m³ OEL-SWITZERLAND:TWA 0.01 mg/m³ OEL-UNITED
KIN
GDOM:TWA 0.1 mg/m³ 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.