


# MATERIAL SAFETY DATA SHEET

## Silver (I) Chloride

<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

<b>Supplier</b> Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States  <b>Company Contact:</b> Michael Doss - Dir. of Regulatory Affairs <b>Telephone Number:</b> 410-398-7200 <b>FAX Number:</b> 410-398-2918 <b>E-Mail:</b> mdoss@colonialmetals.com <b>Web Site:</b> www.colonialmetals.com	<b>Manufacturer</b> Colonial Metals, Inc. Building 20 505 Blue Ball Road Elkton, MD 21921 United States  <b>Company Contact:</b> Michael Doss - Dir. of Regulatory Affairs <b>Telephone Number:</b> 410-398-7200 <b>FAX Number:</b> 410-398-2918 <b>E-Mail:</b> mdoss@colonialmetals.com <b>Web Site:</b> www.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:** 07/31/2012

**Product Name:** Silver (I) Chloride  
**Chemical Name:** Silver (I) Chloride, Silver Monochloride  
**CAS Number:** 7783-90-6  
**Chemical Family:** metal halide  
**Chemical Formula:** AgCl  
**MSDS Number:** 9004  
**Product Code:** 9004

#### **Synonyms**

Argentous chloride

### 2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
Silver Chloride	7783-90-6	99 - 100

### EMERGENCY OVERVIEW

**Caution: Avoid contact and inhalation.**

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## Silver (I) Chloride

### Hazards Identification (Pictograms)



### 3. Hazards Identification

**Primary Routes(s) Of Entry** - Eye: Likely

**Inhalation:** Likely

**Skin:** Likely

**Ingestion:** Likely

**Eye Hazards** - May cause slight to mild irritation of the eyes.

**Skin Hazards** - May cause slight to mild irritation of the skin. May be harmful if absorbed through the skin.

**Ingestion Hazards** - May be harmful if swallowed.

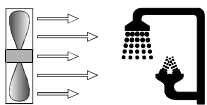
**Inhalation Hazards** - Irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

**Chronic/Carcinogenicity Effects** - Long term exposure to silver and silver salts can lead to the condition known as argyria-a general gray pigmentation of the skin and mucous membranes.

**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). May be irritating to skin, eyes and respiratory tract.

**Conditions Aggravated By Overexposure** - To the best of our knowledge, the chemical, the physical, and toxicological properties of this compound have not been thoroughly investigated.

### First Aid (Pictograms)



### 4. First Aid Measures

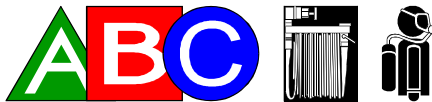
**Eye** - Flush for 15 minutes with plenty of water. If discomfort occurs or persists, contact a physician immediately.

**Skin** - Immediately wash affected area 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 victim is conscious. Never give anything by mouth to an unconscious person. Contact a physician immediately.

**Inhalation** - Remove to fresh air immediately. If discomfort occurs or persists, 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 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.

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### 6. Accidental Release Measures

Sweep up and place in a sealed container. Avoid raising dust. Ventilate area and wash spill site after pick up is complete. Wear appropriate personal protective equipment.

### Handling & Storage (Pictograms)



### 7. Handling And Storage

**Handling And Storage Precautions** - Keep containers tightly closed. Use only with adequate ventilation. Wash thoroughly after handling.

**Handling Precautions** - Avoid creating dust. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Avoid prolonged or repeated exposure.

**Storage Precautions** - Keep in a tightly sealed container in a cool dry place under an inert gas.

**Work/Hygienic Practices** - Use good personal hygiene. Wash thoroughly after handling. Wash thoroughly with soap and water after handling. Handle and store under inert gas. Light sensitive. Moisture sensitive.

### 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: Closed Ventilation system (Laboratory Fume Hood)

#### Safety shower and eyewash

**Eye/Face Protection** - ANSI approved safety glasses/goggles

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

**Respiratory Protection** - Respirator for dust.

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

#### Ingredient(s) - Exposure Limits

Silver Chloride

INGREDIENT: % ACGIH (TWA) OSHA (PEL) CAS# ; Title Compound 7783-90-6 100 0.1mg/m3 (as Ag) 0.1mg/m3 (as Ag)

### 9. Physical And Chemical Properties

**Appearance** - Off white to white powder.

**Odor** - None

**Chemical Type:** Mixture

**Physical State:** Solid

**Melting Point:** 851 °F 455 °C

**Boiling Point:** 2822 °F 1550 °C

**Specific Gravity:** 5.56

**Molecular Weight:** 143.32

**Vapor Pressure:** NA

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## Silver (I) Chloride

### 9. Physical And Chemical Properties - Continued

**Vapor Density:** 1 mmHg

**Solubility:** NA

**Evaporation Rate:** NA

### 10. Stability And Reactivity

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Conditions To Avoid (Stability)** - Exposure to light, and moisture.

**Incompatible Materials** - Strong oxidizing agents.

**Hazardous Decomposition Products** - Hydrogen chloride gas.

**Conditions To Avoid (Polymerization)** - Will not occur.

### 11. Toxicological Information

**Miscellaneous Toxicological Information** - Oral (mouse); LD: >10 gm/kg. Oral (guinea pig); LD: >5 gm/kg.

### Ecological (Pictograms)



### 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** - Environmentally Hazardous Substance, Solid, N.O.S.

**Hazard Class**

9

**DOT Identification Number**

3077

**DOT Shipping Label**

Environmentally Hazardous Substance, Solid, N.O.S.

**Packaging Requirements**

Group III

**Additional Shipping Paper Description** - IATA: Environmentally Hazardous Substance, Solid, N.O.S.

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## Silver (I) Chloride

### DOT (Pictograms)



### TDG - Canada (Pictograms)



### 15. Regulatory Information

**U.S. Regulatory Information** - This product is TSCA listed.

**SARA Section 313 Notification** - Title compound: See category N740 for reporting.

**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: Yes

NDSL: No

**European Union (EU) Regulatory Information** - **Hazard Symbols:**

XI

**Risk Phrases:**

R 36/38 Irritating to eyes and skin.

**Safety Phrases: th 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.**

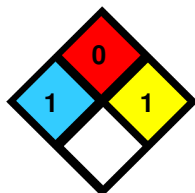
### Right-To-Know (Pictograms)



### DSCL - Europe (Pictograms)



#### NFPA



#### HMIS

HEALTH	1
FLAMMABILITY	0
REACTIVITY	1
PERSONAL PROTECTION	C

### 16. Other Information

**Precautionary Label** - Irritant

**Revision/Preparer Information**

MSDS Preparer: Michael Doss - Dir Reg Affairs

MSDS Preparer Phone Number: 410-398-7200

This MSDS Supersedes A Previous MSDS Dated: 06/05/2008

# MATERIAL SAFETY DATA SHEET

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16. Other Information - Continued

Revision/Preparer Information - Continued

### 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.

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