E-Mail: sds@finemetalscorp.com www.FineMetalsCorp.com

15117 Washington Highway Phone: (804) 227-3381 CHEMTREC: (800) 424-9300 P. O. Box 1055 Ashland VA Fax: (804) 227-3404 Poision Center: (800) 562-8236

Safety Data Sheet

Section 1: Product and Company Information

Product Name: Silver

Company: Fine Metals Corporation

15117 Washington Hwy Ashland, VA 23005

For more information call: 1-804-227-3381

(Monday - Friday 9-4:30)

In case of emergency: Transportation (Chemtrec) 1-800-424-9300

Poison Center: 1-800-562-8236 (24 hours/day, 7 days/week

Section 2: HAZARD IDENTIFICATION

This material is not considered hazardous and is not classified under GHS

Emergency Overview

Emergency Not a hazardous substance or mixture.

Hazard Statements: None.

Precautionary Statements:

Prevention: None. Respnse: None.

Appearance/Form:

Form: Solid Color: Silvery grey Odor: None

Hazard Summary: Not hazardous as sold (solid). Finely divided airborne dust may be flammable if exposed to flame or incompatible materials.

Acute Health Effects

Skin: May cause skin irritation

Eyes: Contact may cause eye irritation Ingestion: Low ingestion hazard in normal use.

Inhalation: May be harmful if inhaled. May cause respiratory irritation.

Chronic Exposure: Ingestion hazards: moderately toxic. May cause stomach discomfort, nausea, vomiting, diarrhea, and narcosis. Aspiration of

material into lungs if swallowed or if vomiting occurs can cause chemical pneumonitis which can be fatal.

Aggravated Medical No known effect.

Conditions:

Carcinogenicity: Not listed as a carcinogen.

Silver 4/27/2015 2:27:56 PM Date: Page 1 of 5

Safety Data Sheet

Section 3: Composition/Information on Ingredients

Chemical Name CAS-No. Reach #

Silver 7440-22-4 Not available 231-131-3 > 99 wt%

Section 4: FIRST AID MEASURES

Skin Contact: Skin cuts and abrasions can be treated by standard first aid. Skin contamination with dust or powder can be removed with

soap and water. Seek medical attention if symptoms develop.

Inhalation: Breathing difficulty, caused by inhalation of dust or fume requires removal to fresh air. Seek medical attention if required.

Ingestion: Seek medical attention.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: This material is non-combustible in solid form. Use a Class D dry powder extinguisher, dolomite, dry sand, graphite, or soda ash.

Unsuitable extinguishing media: Do not use water, carbon dioxide, sodium bicarbonate, halogenated extinguishing agents or foam.

Specific hazards during firefighting:

Dusts at sufficient concentrations can form explosive mixtures with air. Toxic metal fumes may form in fire.

Special protective equipment for Evacuate enclosed and surrounding areas. As in any fire, wear self contained breathing apparatus pressure-demand, **firefighters:** (MSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Practice good chemical hygiene. Avoid dust formation. Avoid breathing vapours, mist or gas.

Environmental Precautions: Do not release to the environment.

Methods for Cleaning Up: In solid form this material poses no special clean-up problems. Use normal clean up procedures; wet sweeping or HEPA

vacuum for clean up of dust or powder. Do not use compressed air for cleaning.

Section 7: HANDLING AND STORAGE

Handling: In solid form this material poses no special problems. Keep away from heat and flame. Keep container closed when not in

use. Remove contaminated clothing and wash before reuse. Wash hands before eating and wash before reuse. Wash

throughly after handling. Provide adequate ventilation at places where dust is formed.

Storage: Store in tightly closed containers. Store in cool, dry, well-ventilated area away from heat, sparks or flame. Protect from

physical damage. Store away from incompatible materials. Do not store near acids.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation or other means to maintain employee exposure as far below limits as possible

Component Exposure Limits

Location		Value
ACGIH TWA	0.1	
NIOSH TWA	0.01	
OSHA TWA	0.01	
Canada - AB, ON, PQ TWA	0.1	
Canada - BC TWA	0.01	
Denmark, Austria TWA	0.01	
Denmark STEL	0.02	
Europe TWA	0.1	
Mexico TWA	0.1	
	ACGIH TWA NIOSH TWA OSHA TWA Canada - AB, ON, PQ TWA Canada - BC TWA Denmark, Austria TWA Denmark STEL Europe TWA	ACGIH TWA 0.1 NIOSH TWA 0.01 OSHA TWA 0.01 Canada - AB, ON, PQ TWA 0.1 Canada - BC TWA 0.01 Denmark, Austria TWA 0.01 Denmark STEL 0.02 Europe TWA 0.1

Silver 4/27/2015 2:27:56 PM Date: Page 2 of 5

Eye Contact: Flush eyes with water for at least 15 minutes. Seek medical attention.

Safety Data Sheet

Poland TWA 0.05
UK WEL TWA 0.1

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended

exposure limits.

Respiratory Protection: Not normally needed. If ventilation is inadequate and this material is handled at elevated temperatures or dust/fumes/mists

are generated a NIOSH/MSHA approved air purifying respirator with a manufacturers approved cartridge or canister may be

permissible under certain circumstances.

Eye/Face: Wear safety glasses or goggles as appropriate to the task performed.

Skin Protection: Lab coat, apron, gloves

Work Hygienic Practices: Practice good chemical hygiene.

Comments: None

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Odor: None

Color: Silvery grey Melting Point: 1761° F Boilling Point: 3632° F

Vapor Pressure: N/A Vapor Density (air = 1): N/A

Evaporation Rate: N/A Solubility In Water: Insoluble

Specific Gravity (water = 1): 10.5

Atomic Weight: 108.86 % Volatility By Volume: Not available

Density: 10.5 g/cm3

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions and usage.

Incompatible Materials: Strong acids, Oxidizing materials, Halogens, Ammonia, Acetylene

Hazardous Decomposition Toxic metal fumes

Products:

Possibility of Hazardous Not available

Reactions:

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Dermal LD50: > 2000 mg/kg (Rat) Oral LD50: > 5000 mg/kg (Rat)

Chronic Toxicity: Chronic exposure to silver may cause argyria, which is characterized by a permanent blue-gray discoloration of the skin, eyes,

and fingernails.

Reproductive Toxicity: Not available Mutagenicity: Not available Carcinogenicity: Not listed

Other: None

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Aquatic toxicity (Acute): 96-Hour LC50: 2.13 µ/L (Pimephales promelas) 48-Hour EC50: .24 µ/L (Daphnia magna)

Persistence/Degradability: The form it is found in depends on environmental conditions. Silver levels of less than 0.000001 mg silver per cubic meter of air (mg/m 3), 0.2-2.0 parts silver per billion parts water (ppb) in surface waters, such as lakes and rivers, and 0.20-0.30 parts silver per million parts soil (ppm) in soils are found from naturally occurring sources. Silver compounds are also found in groundwater and at hazardous waste sites throughout the United States. Drinking water supplies in the United States have been found to contain silver levels of up to 80 ppb. Surveys show that one-tenth to one-third of samples taken from drinking water supplies (both groundwater and surface water) contain silver at

levels greater than 30 ppb.

Silver 4/27/2015 2:27:57 PM

Date: Page 3 of 5

Safety Data Sheet

Bioaccumulation/Accumulation: Not available

Mobility in Environment: Silver that is released into the environment may be carried long distances in air and water. Rain washes silver

compounds out of many soils so that it eventually moves into the groundwater. Silver is stable and remains in the environment in one form or another until it is taken out again by people. Because silver is an element, it does not break down, but it can change its form by combining with other substances. Over time it may change from the form

first released, to metallic silver, and then back to the same or other compounds.

Section 13: DISPOSAL CONSIDERATIONS

Waste Classification: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Recycling is disposal

method of choice.

All disposal activities must comply with federal, state, provincial and local regulations.

Section 14: TRANSPORT INFORMATION

US DOT (ground): Not regulated ICAO/IATA (air): Not regulated IMO/IMDG (water): Not regulated Special Provisions: Not regulated

Section 15: REGULATORY INFORMATION

UNITED STATES

SARA Title III (Superfund Amendments and Reauthorization Act) 313 Reportable Ingredients: Yes

TSCA (Toxic Substance Control Act) status: Not regulated

STATE REGULATIONS

The following components appear in one or more of the following states hazardous substances

Component	CAS	S #	C	A	MA	MN		NJ
Silver	7440-22-4	No	Yes	Yes	Yes	Yes	Yes	

California Proposition 65: This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.

CANADA

WHMIS (Workplace Not regulated

Hazardous Materials Information System):

Domestic Substance List All components of this product are included in inventory, exempt, or notified.

(Inventory):

GENERAL COMMENTS

All components of this product are included in inventroy, exempt, or notified: Australian AICS, Canadian DSL, China IECSC, European EINECS, Korean KECL, New Zealand NZIoC, Philippines PICCS. RCRA Status: listed. CERCLA RQ: 1000 lbs. No reporting of release is required if the diameter of the pieces of the solid metal is larger than 100 micrometers.

Section 16: OTHER INFORMATION

Information Contact: sds@finemetalscorp.com

Issue Date: 7/6/1999 **Revision Date**: 1/1/2015

Safety Data Sheet

HMIS®(II) NFPA

Health: 0

Flammability: 0 0 0 Reactivity: 0 0 0

PPE: B

Ratings range from 0 (no hazard) to 4 (severe hazard)

The information contained in this SDS is believed to be correct, but is not all inclusive and shall be used only as a guide. Fine Metals Corporation shall not be liable for any damage resulting from handling or from contact with the product listed in the SDS. Any comments or questions should be directed to:

Safety Manager Fine Metals Corporation 15117 Washington Highway P O Box 1055 Ashland VA 23005 (804) 227-3381

Silver Date: