

Kurt J. Lesker Company

Silver metal, Pieces



SECTION 1 : Chemical Product and Company Identification

MSDS Name: Silver metal, Pieces

Manufacturer Name: Kurt J. Lesker Company

Address:

P.O. Box 10
1925 Route 51
Clairton, PA 15025

For emergencies in the US, call CHEMTREC: 800-424-9300

Other Phone: US National Poison Hotline: (800) 222-1222

Manufacturer MSDS Revision Date:

06/25/2008
Supersedes: 06/26/2006

Synonyms:

Silver metal – particle size greater than 591 microns (+30 mesh) argentum, shell silver

Chemical Family: Metal

Chemical Formula: Ag

Molecular Weight: 107.86

HMIS

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: F

UPC/EAN: 231-131-3

DOT HAZARD LABEL: No data.

OTHER HAZARD RATINGS:

Health: 2
Flammability: 0
Reactivity: 0
Special Hazard: F

Minimal: 0
Slight: 1
Moderate: 2
Serious: 3
Extreme: 4

Product Codes:



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SECTION 2 : Hazardous Ingredients/Identity Information

Chemical Name	CAS#	Percent	
Silver {Argentum}	7440-22-4	0.0-100.0%	

RTECS:

VW3500000

OSHA PEL TWA: .01 mg/m3

ACGIH TLV TWA: .1 mg/m3

SARA Section 302: No

SARA Section 313: Yes

Other Exposure Guidelines:

Not Established

SEC. 304 RQ: Yes 1000 LB



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SECTION 3 : Physical And Chemical Characteristics

Physical State/Appearance:

Metallic pieces

Color:

White

Odor:

No odor

Physical State:

Solid

pH:

No data.

Vapor Pressure:

(VS. AIR OR MM HG): 0

Vapor Density:

(VS. AIR = 1): No data.

Boiling Point:

2212.00 deg C (4013.6 deg F)

Melting Point:

961.90 deg C (1763.4 deg F)

Solubility In Water:

insoluble

Specific Gravity:

(WATER = 1): 10.5 at 20.0 deg C (68.0 deg F)

Density:

No data.

Evaporation Point:

(VS BUTYL ACETATE=1): No data.

Percent Volatile:

Not Applicable

FlashPoint:

Not Applicable

Upper Flammable Explosive Limit:

Not Applicable

Lower Flammable Explosive Limit:

Not Applicable



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SECTION 4 : Fire And Explosion Hazards

Flash Point:

Not Applicable

Flash Point Method:

No data.

Upper Flammable or Explosive Limit: Not Applicable

Lower Flammable or Explosive Limit: Not Applicable

Extinguishing Media:

USE: Not applicable. Use suitable extinguishing agent for surrounding materials and type of fire.

Fire Fighting Instructions:

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire Hazards:

Dust is flammable



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SECTION 5 : Health Hazards

Silver {Argentum}:

Route of Exposure:

Inhalation: Yes
Skin: No
Eyes: No
Ingestion: Yes
Other: NO

Potential Health Effects:

(ACUTE): The absorption of silver compounds into the circulation and the subsequent deposition to the reduced silver in various tissues of the body may result in the production of a generalized greyish pigmentation of the skin and mucous membranes, a condition known as argyria. The introduction of fine particles of silver through breaks in the skin produces a local pigmentation at the site of the injury. 1 mg/m³ of silver dust causes skin effects. The condition develops slowly, usually after 2–25 years of exposure. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Eye Contact:

Acute: May cause irritation.

Skin Contact:

Acute: May cause irritation.

Inhalation:

Acute: May cause irritation to the upper respiratory system, pulmonary edema, pulmonary fibrosis and lung damage.

Ingestion:

Acute: May cause gastrointestinal disturbances.

Chronic Health Effects:

The absorption of silver compounds into the circulation and the subsequent deposition to the reduced silver in various tissues of the body may result in the production of a generalized greyish pigmentation of the skin and mucous membranes, a condition known as argyria. The introduction of fine particles of silver through breaks in the skin produces a local pigmentation at the site of the injury. 1 mg/m³ of silver dust causes skin effects. The condition develops slowly, usually after 2–25 years of exposure. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

Chronic Eye Contact:

May cause argyrosis.

Chronic Skin Contact:

May cause argyrosis and dermatitis.

Chronic Inhalation:

May cause argyrosis, bronchitis, headache, fatigue, sinusitis, weight loss and kidney injury.

Chronic Ingestion:

May cause kidney injury.

Carcinogenicity:

OSHA Designation: Regulated: No

NTP Designation: No

IARC Designation: Monographs: No

Target Organs:

May affect the respiratory system, skin, eyes and kidney.

Signs/Symptoms:

INHALATION: May cause a red, dry throat, coughing and bluish–grey skin.

INGESTION: May cause abdominal distress, nausea and vomiting.

SKIN: May cause redness, burning, itching and bluish–grey skin.

EYE: May cause redness, burning, itching and watering.

Aggravation of Pre–Existing Conditions:

None

RECOMMENDED EXPOSURE LIMITS: See "Section 2"

Silver {Argentum}:

Acute Health Effects:

Mul–rat TDLO: 330 mg/kg/43W–I:ETA imp–rat TDLO: 2400 mg/kg
Imp–rat TD: 2570 mg/kg

Skin Effects:

SKN imp–mus TDLO: 11 gm/kg

Inhalation Effects:

lhl–hmn TCLO: 1 mg/m³

Other Toxicological Information:

LD50/LC50: See "Above"



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SECTION 6 : Emergency And First Aid Procedures

Eye Contact:

Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.

Skin Contact:

Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention if symptoms persist.

Inhalation:

Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention.

Ingestion:

Give 1–2 glasses of milk or water and induce vomiting; seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

Note to Physicians:

No data available.



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SECTION 7 : Reactivity Data

Chemical Stability:

Stable

Conditions to Avoid:

INSTABILITY: None

Incompatibilities with Other Materials:

MATERIALS TO AVOID: Acetylene and its compounds, hydrogen peroxide, ammonia, aziridine, bromine azide, bromopropane, carboxylic acids, copper + ethylene glycol, electrolytes + zinc, ethanol + nitric acid, ethylene oxide, ethyl hydroperoxide, ethyleneimine, iodoform, nitric acid, ozonides, permonosulfuric acid, peroxyformic acid, C₂H₂, bromoazide, ClF₃, ethyleneimine, H₂O₂, oxalic acid, H₂SO₄ tartaric acid.

Hazardous Polymerization:

Will not occur

CONDITIONS TO AVOID: None

Hazardous Decomposition Products:

Silver oxides.



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SECTION 8 : Precautions For Safe Handling

Personal Precautions:

Wear appropriate respiratory and protective equipment specified in section 9–control measures.

Spill Cleanup Measures:

Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

Other Precautions:

None

Handling:

None

Storage:

None

Hygiene Practices:

WORK/HYGIENIC/MAINTENANCE PRACTICES: Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

HAZARD LABEL INFORMATION

Store in cool, dry area. Store in tightly sealed container. Wash thoroughly after handling.

Waste Disposal:

Dispose of in accordance with local, state and federal regulations.

DOT Subpart E Labeling Requirement: HAZARD LABEL: No data.



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SECTION 9 : Control Measures

Ventilation System:

If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protective Equipment

Routine Handling:

PROTECTIVE EQUIPMENT SUMMARY – HAZARD LABEL INFORMATION:
NIOSH approved respirator. Impervious gloves. Safety glasses. Clothes to prevent skin contact

Hand Protection Description:

PROTECTIVE GLOVES: Rubber gloves

Eye/Face Protection:

Safety glasses

Protective Clothing/Body Protection:

Protective gear suitable to prevent contamination

Respiratory Protection:

(SPECIFY TYPE): NIOSH – approved respirator

Exposure Limits:

See "Section 2"

WORK/HYGIENIC/MAINTENANCE PRACTICES:

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.



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SECTION 10 : Other Information

Silver {Argentum}:

Section 302 (Yes/No): No

Section 304 CERCLA RQ: Yes 1000 LB

Section 313 Toxic Release Form (Yes/No): Yes

HMIS:

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection: F

Label Text:

ADDITIONAL LABEL INFO.: Move to fresh air; induce vomiting; flush with water

MSDS Revision Date:

06/25/2008

Supersedes: 06/26/2006

Disclaimer:

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OTHER HAZARD RATINGS:

Health: 2

Flammability: 0

Reactivity: 0

Special Hazard: F

Minimal: 0

Slight: 1

Moderate: 2

Serious: 3

Extreme: 4

Abbreviations used:

NA=Not Applicable

NE: Not Established

ADDENDUM : Other Client Information

Notes:

, EJTAG108X3MM, EJTAG4100M, EJTAGPDCU4A4, EJTAGPTSPL02, EJTAGPT50MM, EJTAGPTSPL01, EJTAGX3.5X18, EJTAGX401.5+, EJTAGX4050MM, EJTAGX4084MM, EJTAGXX1.3A+, EJTAGXX401A2, EJTAGXX401A4, EJTAGXX402A2, EJTAGXX402A4, EJTAGXX403A2, EJTAGXX403A4, EJTAGXX404A2, EJTAGXX404A4, EJTAGXX405A2, EJTAGXX405A4, EJTAGXX406A2, EJTAGXX406A4, EJTAGXX407A+, EJTAGXX407A4, EJTAGXX408A2, EJTAGXX408A4, EJTAGXX460M*, EJTAGXX8A5MM, EJTAGXXMRCA4, EJTAGXXT10

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