Lead-Silver Alloys

Material Safety Data Sheet

1. Product And Company Identification

Supplier

Lucas-Milhaupt, Inc.
A Handy & Harman Company
5656 South Pennsylvania Avenue
Cudahy, WI 53110
Telephone Number: 414-769-6000
FAX Number: 414-769-1093

Supplier Emergency Contacts & Phone Number

Chemtrec: (800) 424-9300

Manufacturer

Lucas-Milhaupt, Inc.
A Handy & Harman Company
5656 South Pennsylvania Avenue
Cudahy, WI 53110
Telephone Number: 414-769-6000
FAX Number: 414-769-1093

Manufacturer Emergency Contacts & Phone Number

Chemtrec: (800) 424-9300

Issue Date: 07/17/2008
Product Name: Lead-Silver Alloys
CAS Number: Not Established
MSDS Number: 211
Product Code: 63-001; 63-003; 63-004; 63-005

Product Identification Text

WARNING: These products contain a chemical(s) known to the State of California

to cause cancer and birth defects or other reproductive harm.

2. Composition/Information On Ingredients

Ingredient Name - (CAS Number)	%
Lead (7439-92-1)	93 - 99
Silver (7440-22-4)	1 - 7

No Data Available...

3. Hazards Identification

Primary Routes(s) Of Entry

Ingestion; inhalation.

Eye Hazards

Eye contact with finely-divided forms of product may cause irritation and/or argyria, a permanent blue-gray discoloration of the skin, eyes, mucous membranes, and respiratory tract.

Skin Hazards

Skin contact with these products in finely-divided forms may cause irritation and/or argyria.

Ingestion Hazards

Ingestion of these products in finely-divided forms may cause nausea, vomiting, and gastrointestinal irritation. Long-term chronic ingestion may damage the liver, kidneys, nervous system, gastrointestinal system, blood-forming organs, and male reproductive system.

Inhalation Hazards

Inhalation of the components of these products is not known to present a significant risk to health when used according to instructions and with appropriate protective measures (see Section #8). Inhalation of component elements has been reported to cause one or more of the following symptoms and effects upon excessively high or prolonged exposure:

LEAD: Chronic exposure may cause various systemic effects, such as damage to hematological, neurological, and renal functions. Lead inhibits the synthesis of hemoglobin, and may lead to anemia. Neurological effects may include central and peripheral nervous system disorders. Lead may also affect the cardiovascular, hepatic, gastrointestinal, and endocrine systems, and has been determined to adversely affect the male reproductive organs and functions.

SILVER: Chronic exposure via inhalation may cause argyria.

4. First Aid Measures

Eye

Flush affected areas with water for at least fifteen minutes. Seek medical assistance if necessary.

Skin

Remove contaminated clothing. Wash affected area with large quantities of water for at least five minutes. Seek medical attention if necessary. Launder or dry-clean clothing before reuse.

Ingestion

If subject is conscious, induce vomiting. If unconscious or convulsive, seek immediate medical assistance.

Inhalation

If signs and symptoms of toxicity are observed, remove subject from area, administer oxygen, and seek medical attention. Keep the subject warm and at rest. Perform artificial respiration if breathing has stopped.

Note To Physician

None of the components are acutely toxic by ingestion, nor are they absorbed through the skin. Chronic ingestion of lead can increase the risk of plumbism. Extensive or prolonged skin contact may cause argyria.

5. Fire Fighting Measures

Flash Point: N/Appl. °F N/Appl. °C
Autoignition Point: N/Appl. °F N/Appl. °C
Lower Explosive Limit: N/Appl.
Upper Explosive Limit: N/Appl.

Fire And Explosion Hazards

In finely-divided form, these products may ignite when exposed to flame or by reaction with incompatible materials (see Section #10). If present in a fire or explosion, they may emit fumes of the constituent metals or metal oxides.

Extinguishing Media

Use dry chemical. Do not use water.

Fire Fighting Instructions

If fighting a fire in which these products are present, wear a self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

6. Accidental Release Measures

If a finely-divided form of product is spilled, clean up spillage so as to minimize dispersion of dust. Wet sweeping or vacuuming using HEPA filtration are recommended.

7. Handling And Storage

Handling Precautions

No special handling precautions are required.

Storage Precautions

Do not store in proximity to incompatible materials (see Section #10).

Work/Hygienic Practices

To minimize ingestion, wash hands and face before eating, drinking, applying cosmetics, or using tobacco.

8. Exposure Controls/Personal Protection

Engineering Controls

Use appropriate ventilation (e.g., dilution, local exhaust) adequate to maintain concentrations of all components to within their applicable standards.

Eye/Face Protection

Wear eye protection adequate to prevent eye contact with finely-divided forms of product and eye injury if products are used with a flame. Plastic-frame spectacles with side shields and filter lenses (shade #3/#4) are recommended.

Skin Protection

Wear appropriate protective gloves and clothing to prevent skin injury if used with a flame and/or for prolonged or repeated contact with finely-divided forms of product. Avoid flammable fabrics.

Respiratory Protection

If an exposure level exceeds an applicable exposure standard, use a NIOSH-approved respirator having a configuration (type of facepiece, filter media, assigned protection factor, etc.) appropriate to the concentration of the contaminant(s) generated. For guidance on selection and use of respiratory protection, consult American National Standard Z88.2 (ANSI, New York, NY 10036 USA).

Ingredient(s) - Exposure Limits

Lead
ACGIH TLV: 0.05 mg/m3 TWA OSHA PEL: 50 micrograms/m3 TWA
Silver
ACGIH TLV: 0.1 mg/m3 TWA (metal) OSHA PEL: 0.01 mg/m3 TWA

9. Physical And Chemical Properties

Appearance

Odorless gray-white metals in forms of wire, rod, strip, powder, grain, tape, or preformed shapes.

Chemical Type: Mixture
Physical State: Solid
Solubility: Insoluble

Other commonly-reported physical properties (odor threshold, evaporation rate, vapor pressure, vapor density, oil-water partition coefficient, percent volatiles, percent VOCs, pH, viscosity) are not applicable to these products.

10. Stability And Reactivity

Stability: stable
Hazardous Polymerization: will not occur
Conditions To Avoid (Stability)

Silver can form an unstable acetylide if in contact with acetylene gas.

Incompatible Materials

Ammonia; strong acids; ethylene imine; chlorine trifluoride; inorganic and organic peroxides; peroxyformic acid; tartaric acid; bromoazide; oxalic acid; 1-bromo-2-propyne; permonosulfuric acid; ammonium nitrate; azides; carbides; zirconium.

Hazardous Decomposition Products

Heating to elevated temperatures may liberate metal/metal oxide fumes.

11. Toxicological Information

Reproductive Effects

Lead is readily transported across the human placental membrane, and can induce fetotoxic effects such as reduced periods of gestation and impaired neurological development in offspring.

Conditions Aggravated By Overexposure

Pre-existing pulmonary diseases (e.g., bronchitis, emphysema) may be aggravated by inhalation overexposure, particularly as fume. Chronic overexposure by inhalation and/or ingestion may aggravate pre-existing diseases of the gastrointestinal system, liver, nervous system, blood-forming organs, and male reproductive system.

Ingredient(s) - Carginogenicity

Lead

Listed In The IARC Monographs

Ingredient(s) - Toxicological Data

Lead

LD50: No data available LC50: No data available

Silver

LD50: >2,000 mg/kg (oral/rat) LC50: No data available

12. Ecological Information

In their intended manner of use, these products should not be released into the environment, and adverse effects on ecosystems are not anticipated under recommended conditions of use, storage, and disposal.

13. Disposal Considerations

Dispose of unused or unusable product in accordance with applicable Federal, State/Provincial, and local regulations.

14. Transport Information

These products are not Hazardous Substances or Dangerous Goods per USDOT, TDG (Canada), IATA, or IMO regulations.

15. Regulatory Information

SARA Hazard Classes

Acute Health Hazard; Chronic Health Hazard

Ingredient(s) - U.S. Regulatory Information

Lead
    SARA Title III - Section 313 Form "R"/TRI Reportable Chemical
Silver
    SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

Ingredient(s) - State Regulations

Lead
    California - Proposition 65

Canadian Regulatory Information

WHMIS Class(es) and Division(s): D2A
Components on Ingredients Disclosure List:
1. Lead, elemental (CASRN 7439-92-1)
2. Silver, elemental (CASRN 7440-22-4)

16. Other Information

Revision/Preparer Information

This MSDS Supersedes A Previous MSDS Dated: 07/24/2002

Disclaimer

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Lucas-Milhaupt, Inc.