

Lead-Silver Alloy

Safety Data Sheet

1. Product and Company Identification

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Manufacturer

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Lucas Milhaupt, Inc.  
5656 South Pennsylvania Avenue  
Cudahy, WI 53110 USA  
Telephone: 414-769-6000  
www.lucasmilhaupt.com

Emergency Phone Number

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CHEMTREC: within USA and Canada 1-800-424-9300  
CHEMTREC: outside USA and Canada +1 703-741-5970

SDS Number: 211  
Product: PB-AG

Product Codes: 63-001 (97.5Pb/2.5Ag), A00000390 (97.5Pb/2.5Ag), 63-003, 63-004 (97.5Pb/2.5Ag), A00000391 (97.5Pb/2.5Ag), 63-005

Product Use(s): Alloys for soldering and other metallurgical processes

2. Hazards Identification

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Classification(s)

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Specific Target Organ Toxicity, Repeated Exposure: Hazard Category 1

Toxic to Reproduction: Hazard Category 1A

Label Symbol(s): Health Hazard

Label Signal Word(s): Danger

Label Hazard Statement(s)

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May cause damage to the nervous system, gastrointestinal system, blood-forming organs, and male reproductive system by inhalation or ingestion. May damage fertility or the unborn child.

Label Precautionary Statement(s)

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Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Store locked up.  
Do not breathe dust or fume.  
Wear protective gloves and eye/face protection.  
Wash hands thoroughly after handling.  
Do not eat, drink, or smoke when using this product.  
If exposed or concerned or if you feel unwell, get medical advice/attention.  
Dispose of contents and container in accordance with applicable regulations.  
The acute toxicities of 97-99% of the product's ingredients are unknown.



WARNING: This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

### 3. Composition/Information on Ingredients

Ingredient	CAS Number	%	Impurities
Lead	7439-92-1	93-99	None known
Silver	7440-22-4	1-7	None known

### 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. Do not give anything by mouth to an unconscious or convulsive person.

#### 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 or Poison Control Center

None of the components are acutely toxic by ingestion, nor are they absorbed through the skin.

### 5. Fire Fighting Measures

#### Fire and Explosion Hazards

This product is non-flammable and non-explosive. If present in a fire or explosion, it may emit fumes of the constituent metals or their oxides.

#### Extinguishing Media

Use dry chemical. Do not use water.

#### Fire Fighting Instructions

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

## 6. Accidental Release Measures

### Methods and Materials

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

### Personal Precautions

Avoid contact with skin, eyes, and mucous membranes.

### Environmental Precautions

Prevent spills from entering sewers or contaminating soil.

## 7. Handling and Storage

### Handling Precautions

No special handling precautions are required.

### Work and Hygiene Practices

To prevent ingestion following use of the product, wash hands and face before eating, drinking, applying cosmetics, or using tobacco. Remove contaminated clothing or protective equipment before entering eating/drinking areas.

### Storage Precautions

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

## 8. Exposure Controls and Personal Protection

### Ingredient(s) - Exposure Limits

#### Lead

ACGIH TLV: 0.05 mg/m<sup>3</sup> TWA

OSHA PEL: 50 micrograms/m<sup>3</sup> TWA

#### Silver

ACGIH TLV: 0.1 mg/m<sup>3</sup> TWA (metal)

OSHA PEL: 0.01 mg/m<sup>3</sup> TWA

### Ingredients - Biological Limits

#### Lead

ACGIH BEI: 30 micrograms/dl whole blood

#### Silver

No ACGIH BEI(s) or other biological limits

### Engineering Controls

Use dilution or local exhaust ventilation adequate to maintain concentrations of all components and their byproducts to within their applicable standards.

### Eye/Face Protection

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

## 8. Exposure Controls and Personal Protection (Continued)

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### Skin Protection

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

### Respiratory Protection

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

## 9. Physical and Chemical Properties

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Appearance: gray-white metals, various forms

Odor: none

Odor threshold: not applicable

pH: not applicable

Melting Point: not determined

Freezing point: not applicable

Boiling point/boiling range: not determined

Flash Point: not applicable

Evaporation Rate: not applicable

Flammability Class: not applicable

Lower Explosive Limit: not applicable

Upper Explosive Limit: not applicable

Vapor pressure: not applicable

Vapor density: not applicable

Relative density (H<sub>2</sub>O): not determined

Solubility (H<sub>2</sub>O): insoluble

Oil-water partition coefficient: not applicable

Autoignition Point: not applicable

Decomposition temperature: not applicable

Viscosity: not applicable

## 10. Stability and Reactivity

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Reactivity: none reasonably foreseeable

Stability: stable

Hazardous Polymerization: will not occur

Risk of Dangerous Reactions: none reasonably foreseeable

### Incompatible Materials

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Acetylene; ammonia; nitric acid; ethylene imine; sulfuric acid; chlorine trifluoride; peroxides; permonosulfuric acid; peroxyformic acid; oxalic acid; tartaric acid; bromoazide; ammonium nitrate; peroxides; azides; carbides; zirconium.

### Hazardous Decomposition Products

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

## 11. Toxicological Information

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This product has not been tested for toxicology by the manufacturer.

### Ingredient(s) - Toxicological Data

#### Primary Routes(s) of Entry

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Ingestion; inhalation.

#### Eye Hazards

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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

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

#### Ingestion Hazards

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Ingestion of finely-divided forms of product may cause nausea, vomiting, and gastrointestinal irritation.

#### Inhalation Hazards

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Inhalation of toxicologically-significant quantities of the components is unlikely when the product is used in accordance with instructions and specified protective measures (see Section #8).

#### Symptoms Related to Overexposure

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Pre-existing pulmonary diseases (e.g., bronchitis, asthma) may be aggravated by inhalation overexposure, particularly as fume.

#### Delayed Effects from Long Term Overexposure

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Chronic overexposure by inhalation and/or ingestion may aggravate pre-existing diseases of the liver, kidneys, gastrointestinal system, nervous system, blood-forming organs, and male reproductive system.

#### Carcinogenicity

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Lead (CASRN 7439-92-1) is listed in the IARC Monographs.

#### Germ Cell Mutagenicity

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The product contains no chemicals determined to be germ cell mutagens.

#### Reproductive Effects

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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.

## 11. Toxicological Information (Continued)

### Acute Toxicity Estimates

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

Interactive Effects of Components: no data available

## 12. Ecological Information

No ecological data is available for the product. Available ecological data for the components is as follows:

### Lead

No data available for Aquatic Toxicity to Fish and Invertebrates, Aquatic Toxicity to Plants and Microorganisms, Toxicity to Terrestrial Organisms, Persistence and Degradability, Bioaccumulation Potential, Mobility in Soil.

### Silver

No data available for Aquatic Toxicity to Fish and Invertebrates, Aquatic Toxicity to Plants and Microorganisms, Toxicity to Terrestrial Organisms, Persistence and Degradability, Bioaccumulation Potential, Mobility in Soil.

Ozone Depletion Potential: This product contains no ingredients listed in the Annexes to the Montreal Protocol on Substances that Deplete the Ozone Layer.

## 13. Disposal Considerations

Do not discharge waste product into sanitary or storm sewers or allow it to contaminate soil. Consult applicable Federal, State/ Provincial, and local regulations.

## 14. Transport Information

Transport is not regulated by USDOT, TDG (Canada), IATA, or IMO.

## 15. Regulatory Information

### United States Regulatory Information

#### TSCA Information

All components of these products are listed in the EPA's TSCA inventory.

SARA Hazard Classes: Chronic Health Hazard

#### SARA Section 313 Notification

These products contain these ingredients in concentrations >1% (>0.1% for carcinogens regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

Lead (CASRN 7439-92-1)

15. Regulatory Information (Continued)

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Ingredient(s) - State Regulations  
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Lead (CASRN 7439-92-1): California Proposition 65 listed chemical

Canadian Regulatory Information  
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All components of these products are listed on either the Domestic Substances List (DSL) or the Nondomestic Substances List (NDSL).

WHMIS Class(es) and Division(s): D2A, D2B

Component(s) on Ingredients Disclosure List:

1. Lead, elemental (CASRN 7439-92-1)
2. Silver, elemental (CASRN 7440-22-4)

This product has been classified according to the hazard criteria of the CPR and this SDS contains all of the information required by the CPR.

16. Other Information  
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HMIS Ratings (Legend)  
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Health - 2\* (moderate chronic hazard)

Flammability - 0 (minimal hazard)

Physical Hazard - 0 (minimal hazard)

PPE - see Note

Note: Lucas-Milhaupt, Inc. recommends use of protective eyewear and gloves (Personal Protection Index "B") as standard PPE. HMIS recommends that its ratings be used only in conjunction with a fully implemented HMIS program, and that specific PPE codes be created by the user, who is familiar with the actual conditions under which the product is used. We cannot anticipate every condition of the product's use, and it is the user's responsibility to evaluate the hazards pertinent to its specific operations, and to determine the specific PPE required.

NFPA Ratings  
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Health - 2      Flammability - 0      Reactivity - 0

Preparation Information  
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Date of Preparation: 7 July 2014

Date of Prior SDS: 17 July 2008

Disclaimer  
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Lucas-Milhaupt, Inc.