Silver (BRAZE 999)

Material Safety Data Sheet

1. Product And Company Identification

Supplier

Lucas-Milhaupt, Inc.

5656 S. Pennsylvania Ave.

Cudahy, WI 53110

Supplier Emergency Contacts & Phone Number

Chemtrec: (800) 424-9300

Lucas-Milhaupt, Inc.: (414) 769-6000

Manufacturer

Lucas-Milhaupt, Inc.

5656 S. Pennsylvania Ave.

Cudahy, WI 53110

Manufacturer Emergency Contacts & Phone Number

Chemtrec: (800) 424-9300

Lucas-Milhaupt, Inc.: (414) 769-6000

Issue Date: 10/08/2001

These Alloys Are Sold Under The BRAZE Or SILVALOY Tradenames

Product Name: Silver (BRAZE 999)

CAS Number: Not Established

Chemical Formula: Fine Silver Brazing Alloy

MSDS Number: 85
Product Code: 32-999

2. Composition/Information On Ingredients

Ingredient Name - (CAS Number) - %

Silver (7440-22-4) > 99.9

No Data Available...

3. Hazards Identification

Eye Hazards

Eye contact with this product in finely divided forms may cause irritation, argyria, and/or conjunctivitis.

Skin Hazards

Skin contact with this product in finely divided forms may cause irritation and/or argyria.

Ingestion Hazards

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

Inhalation Hazards

Inhalation of the components of this product is not known to present a significant risk to health when used according to instructions and with appropriate protective measures (see Section #8). Chronic exposure to silver may produce argyria, a permanent blue-gray discoloration of the skin, eyes, mucous membranes, and respiratory tract.

4. First Aid Measures

Eye

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

Skin

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Remove contaminated clothing. Wash affected area with large quantities of water for at least five minutes. Seek medical assistance if necessary.

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.

5. Fire Fighting Measures

Fire And Explosion Hazards

In finely divided form, this product may ignite when exposed to flame or by reaction with incompatible materials (see Section #6). If present in a fire or explosion, it may emit fumes of silver and silver oxide.

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

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 And Storage Precautions

Do not store in proximity to incompatible materials (see Section #6).

Work/Hygienic Practices

To minimize the possibility of 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 and their decomposition byproducts to within their respective OSHA PELs or other applicable standards.

Eye/Face Protection

Wear eye protection adequate to prevent eye contact with finely divided forms of product and eye injury from the hazards of brazing. Plastic-frame spectacles with side shields and filter lenses (shade #3 or #4) are recommended.

Skin Protection

Wear appropriate protective gloves and clothing to prevent skin injuries from the hazards of brazing and/or for prolonged or repeated contact with finely divided forms of product. Avoid flammable fabrics.

Respiratory Protection

If an exposure level exceeds an OSHA PEL(s) or other applicable standard, use a NIOSH-approved respirator having a configuration (class, 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

Silver

OSHA PEL: 0.01 mg/m3 TWA

ACGIH TLV: 0.1 mg/m3 TWA (metal)

9. Physical And Chemical Properties

Appearance

Odorless silver metal in form of wire, rod, strip, powder, grain, or preformed shapes.

Chemical Type: Pure

Melting Point: ca. 1761 °F ca. 960 °C

Specific Gravity: ca. 10.50 Molecular Weight: 0.00 Percent Volatiles: N/A

Percent VOCs: 0.00

Vapor Pressure: Not Applicable (N/A)

Vapor Density: N/A Solubility: Insoluble

10. Stability And Reactivity

Conditions To Avoid (Stability)

Stable at room temperature. Silver can form an unstable acetylide upon contact with acetylene gas.

Incompatible Materials

Strong oxidizers; Se; Te; Mg; chlorates; NH3; HNO3; azides, ethanol, ethylene imine; ClF3; inorganic and organic peroxides; peroxyformic acid; chlorine and fluorine; permonosulfuric acid; CrO3; Mn and Ca chlorides; CS2; nitrobenzene; hydrazine mononitrate; ferric carbonyl; seleninyl bromide.

Hazardous Decomposition Products

Heating to elevated temperatures may liberate silver/silver oxide fume. Hazardous polymerization will not occur.

11. Toxicological Information

Miscellaneous Toxicological Information

Carcinogenicity: Silver is not classified as a potential or demonstrated human carcinogen by IARC, NTP, or OSHA.

Conditions Aggravated By Exposure

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

12. Ecological Information

No Data Available...

13. Disposal Considerations

Consult the manufacturer for disposition of unused or unusable product.

14. Transport Information

Hazard Class

Shipment not controlled by USDOT/ICAO/IMO regulations.

15. Regulatory Information

SARA Hazard Classes

Chronic Health Hazard

16. Other Information

No Data Available...

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Lucas-Milhaupt, Inc.