

Palladium

Safety Data Sheet

1. Product and Company Identification

Manufacturer

Lucas-Milhaupt, Inc.
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Emergency Phone Number

Chemtrec: 800-424-9300

SDS Number: 418

Product Code: 69-303

Product Use(s): Alloy for brazing and other metallurgical processes

2. Hazards Identification

Classification(s): none applicable

Label Symbol(s): none applicable

Label Signal Word(s): none applicable

Label Hazard Statement(s): none applicable

Label Precautionary Statement(s)

The acute toxicities of 100% of the product's ingredients are unknown.

3. Composition/Information on Ingredients

Ingredient	CAS Number	%	Impurities
Palladium	7440-05-3	>99.9	None known

4. First Aid Measures

Eye

Not applicable.

Skin

Not applicable.

Ingestion

Not applicable.

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 readily absorbed through the skin. Long-term chronic exposure may cause argyria.

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

None applicable.

Personal Precautions

None applicable.

Environmental Precautions

None applicable.

7. Handling and Storage

Handling Precautions

No special handling precautions are required.

Work and Hygiene Practices

As good hygiene practice, 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

Ingredients - Exposure Limits

Palladium

No ACGIH TLV(s)

No OSHA PEL(s)

Ingredients - Biological Limits

Palladium

No ACGIH BIE(s) or other biological limit(s)

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 injury if the product is used with a flame. Plastic-frame spectacles with side shields and filter lenses (shade #3/#4) are recommended.

Skin Protection

Wear protective gloves and clothing to prevent skin injuries if the product is used with a flame. Avoid flammable fabrics.

Respiratory Protection

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 -----

Appearance: lustrous silver metal in the form of strip

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 (H₂O): approx. 12.0

Solubility (H₂O): insoluble

Oil-water partition coefficient: not applicable

Autoignition Point: not applicable

Decomposition temperature: not applicable

Viscosity: not applicable

10. Stability and Reactivity -----

Reactivity: none reasonably foreseeable

Stability: stable

Hazardous Polymerization: will not occur

Risk of Dangerous Reactions: none reasonably foreseeable

Incompatible Materials

Aluminum; hydrogen plus isopropyl alcohol; oxygen difluoride; sulfur.

Hazardous Decomposition Products

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

11. Toxicological Information

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

Ingredients - Toxicological Data

Palladium

LD50: No data available

LC50: No data available

Primary Routes(s) of Entry

Inhalation.

Eye Hazards

As a solid, eye contact is not a plausible mode of exposure.

Skin Hazards

As a solid, skin contact is not a plausible mode of exposure.

Ingestion Hazards

As a solid, ingestion is not a plausible mode of exposure.

Inhalation Hazards

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

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

Delayed Effects from Long Term Overexposure

None are reasonably foreseeable.

Carcinogenicity

This product contains no chemicals classified as potential or demonstrated carcinogens by IARC, NTP, or OSHA.

Germ Cell Mutagenicity

This product contains no components determined to be germ cell mutagens.

Reproductive Effects

This product contains no components determined to be damaging to fertility or to the unborn child.

Acute Toxicity Estimates

LD50 (oral): no data available

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:

Palladium

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

Ozone Depletion Potential: This product contains no ingredients listed in the Annexes to the Montréal 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

All components of this product are listed on the EPA's TSCA inventory.

SARA Hazard Classes: none applicable

SARA Section 313 Notification

This product contains no components in concentrations >1% (>0.1% for carcinogens) subject to Section 313 of the Emergency Preparedness and Community Right-to-Know Act (EPCRA) of 1986 and of 40CFR, Part 372.

Canadian Regulatory Information

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): D2B

Components on Ingredients Disclosure List: none

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

HMIS Ratings

Health - 1 (slight 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

Health - 1 Flammability - 0 Reactivity - 0

Preparation Information

Date of Preparation:
Date of Prior SDS: 3 January 2007

Disclaimer

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Lucas-Milhaupt, Inc.