

Permabraz 800

Safety Data Sheet

1. Product and Company Identification

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Supplier and Manufacturer

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Lucas Milhaupt, Inc.  
5656 South Pennsylvania Avenue  
Cudahy, WI 53110 USA  
Telephone: 414-769-2000  
www.lucasmilhaupt.com

Emergency Phone Number

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Chemtrec: 800-424-9300

SDS Number: 166

Product Code: 18-800

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

2. Hazards Identification

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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)

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100% of the products consist of ingredients of unknown acute toxicity.

3. Composition/Information on Ingredients

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Ingredient    CAS Number    %    Impurities

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Gold            7440-57-5    79-81    None known  
Tin             7440-31-5    19-21    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

None of the components are acutely toxic by ingestion, nor are they absorbed through the skin. Long-term chronic exposure may cause argyria.

#### 5. Fire Fighting Measures

##### Fire and Explosion Hazards

These products are non-flammable and non-explosive. If present in a fire or explosion, they 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 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

## Methods and Materials

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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

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Avoid contact with skin, eyes, and mucous membranes.

## Environmental Precautions

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Prevent spills from entering sewers or contaminating soil.

## 7. Handling and Storage

### Handling Precautions

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No special handling precautions are required.

### Work and Hygiene Practices

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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

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

## 8. Exposure Controls and Personal Protection

### Ingredients - Exposure Limits

#### Gold

No ACGIH TLV(s)

No OSHA PEL(s)

#### Tin

ACGIH TLV: 2 mg/m<sup>3</sup> TWA

OSHA PEL: 2 mg/m<sup>3</sup> TWA

### Ingredients – Biological Limits

#### Gold

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

#### Tin

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

## Engineering Controls

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

#### Eye/Face Protection

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Wear eye protection adequate to prevent eye contact with the product and 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

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Wear protective gloves and clothing to prevent skin injuries if the product is 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: Gold-yellow 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): approx. 16

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  
Conditions to Avoid: contact with incompatible materials

#### Incompatible Materials

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Ammonia; strong acids; peroxides; chlorine trifluoride; bromine trifluoride; cupric nitrate; sulfur.

#### 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 subject to toxicological testing by the supplier/ manufacturer.

#### Ingredients - Toxicological Data

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##### Gold

LD50: No data available                      LC50: No data available

##### Tin

LD50: No data available                      LC50: No data available

#### Primary Routes(s) of Entry

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Ingestion; inhalation.

#### Eye Hazards

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Eye contact with this product in finely-divided forms may cause irritation.

#### Skin Hazards

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Skin contact with this product, particularly in finely-divided forms, may cause irritation.

#### Ingestion Hazards

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Ingestion of this product in finely-divided forms 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). Inhalation of

tin fume may cause stannosis (a benign pneumoconiosis), shortness of breath, and respiratory irritation.

#### 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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None known.

#### Carcinogenicity

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

#### Germ Cell Mutagenicity

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

#### Reproductive Effects

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The product contains no components determined to be damaging to fertility of the unborn child.

#### Acute Toxicity Estimates

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LD50 (oral): no data available  
LD50 (dermal): no data available  
LC50: no data available

Interactive Effects of Components: no data available

## 12. Ecological Information

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

#### Gold

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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.

#### Tin

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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 Montréal Protocol on Substances that Deplete the Ozone Layer.

### 13. Disposal Considerations

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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

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

### 15. Regulatory Information

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#### United States Regulatory Information

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

SARA Hazard Classes: Chronic Health Hazard

#### SARA Section 313 Notification

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

#### Canadian Regulatory Information

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All components of this product 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: Tin, elemental (CASRN 7440-31-5)

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

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Health – 1\* (slight chronic hazard)

Flammability – 0 (slight hazard)

Physical Hazard – 0 (slight 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 - 1 Flammability - 0 Reactivity – 0

#### Preparation Information

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Date of Preparation: 20 May 2014

Date of Prior SDS: 25 May 2004

#### Disclaimer

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Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

Lucas-Milhaupt, Inc.