

Safety Data Sheet

1. Product and Company Identification

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Manufacturer

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Lucas-Milhaupt, Inc.  
235 Kilvert Street  
Warwick, RI 02886 USA  
Telephone: 401-739-9550  
www.lucasmilhaupt.com

Emergency Phone Number

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Chemtrec: 800-424-9300

Product Code: 95-5rc

Product: 29777 (Cored Solder Alloy)

Product Use(s): Alloy for soldering

2. Hazards Identification

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Specific Target Organ Toxicity, Repeated Exposure: Hazard  
Category 2

Skin Sensitization: Hazard Category 1B

Label Symbol(s): Health Hazard; Exclamation Point

Label Signal Word(s): Warning

Label Hazard Statement(s)

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May cause damage to the respiratory system, blood, heart, and  
circulatory system through prolonged or repeated exposure.  
May cause an allergic skin reaction.

Label Precautionary Statement(s)

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Wear protective gloves and eye/face protection.  
Do not breathe dust or fume.  
Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water. Wash contaminated clothing before  
reuse. Contaminated work clothing must not be allowed out of the workplace.  
If skin irritation or rash occurs, get medical advice or attention.

Dispose of contents and container in accordance with applicable regulations.  
The acute toxicities of 94-96% of the products' ingredients are unknown.



### 3. Composition/Information on Ingredients

Ingredient	CAS Number	%	Impurities
Antimony	7440-36-0	4-6	None known
Rosin	8050-09-7	1-3	None known
Tin	7440-31-5	94-96	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, nor are they absorbed through the skin. Skin contact with the core may cause irritation or sensitization.

### 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, their oxides, or thermal decomposition products such as formaldehyde and organic acids.

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

Not applicable.

### 7. Handling and Storage

Handling Precautions

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No special handling precautions are required.

#### Work and Hygiene Practices

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As good practice 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

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#### Ingredients - Exposure Limits

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##### Antimony

ACGIH TLV: 0.5 mg/m3 TWA

OSHA PEL: 0.5 mg/m3 TWA

##### Rosin

ACGIH TLV: as low as possible (Sensitizer) No OSHA PEL(s)

##### Tin

ACGIH TLV: 2 mg/m3 TWA

OSHA PEL: 2 mg/m3 TWA

#### Ingredients - Biological Limits

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##### Antimony

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

##### Rosin

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 appropriate 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 injury if the product is used with a flame. Plastic-frame spectacles with side shields are recommended.

#### Skin Protection

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Wear appropriate protective gloves and clothing to prevent skin injury if the products are used with a flame. 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: silver to gray metal in form of flux-cored wire  
Odor: slight  
Odor threshold: not applicable  
pH: not applicable  
Melting Point: not determined  
Freezing point: not applicable  
Boiling point/boiling range: not applicable  
Flash Point: not applicable  
Evaporation Rate: not applicable

Flammability Class: not applicable  
Lower/Upper Explosive Limits: not applicable  
Vapor pressure: not applicable  
Vapor density: not applicable  
Relative density (H<sub>2</sub>O): approx. 7.9  
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; azides; carbides; zirconium; halogens; bromine trifluoride; cupric nitrate; sulfur.

## Hazardous Decomposition Products

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Heating to elevated temperatures may liberate metal/metal oxide fumes and/or rosin decomposition byproducts.

## 11. Toxicological Information

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

## Ingredients - Toxicological Data

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Antimony  
    LD50: 7,000 mg/kg (oral/rat)                      LC50: No data available  
Rosin  
    LD50: 1,710 mg/kg (oral/rat)                    LC50: No data available  
Tin  
    LD50: No data available                          LC50: No data available

#### Primary Routes(s) of Entry

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Inhalation.

#### Eye Hazards

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

#### Skin Hazards

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Skin contact with the rosin core may cause irritation or sensitization.

#### Ingestion Hazards

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

#### 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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Overexposure to the thermal decomposition products of rosin by inhalation may cause respiratory system irritation and/or asthma.

#### Delayed Effects from Long Term Overexposure

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None are reasonably foreseeable.

#### 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 chemicals determined to be germ cell mutagens.

#### Reproductive Effects

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The product contains no chemicals determined to be damaging to fertility or to 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 or any of its components.

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

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: Acute Health Hazard; Chronic Health Hazard

#### SARA Section 313 Notification

This product contains these ingredients in concentrations >1% (for carcinogens >0.1%) subject to Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

1. Antimony (CASRN 7440-36-0)

#### Canadian Regulatory Information

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

Component(s) on Ingredients Disclosure List:

1. Antimony, elemental (CASRN 7440-36-0)
2. 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

#### HMIS Ratings (Legend)

Health - 1\* (slight chronic hazard)  
Flammability - 0 (minimal hazard)  
Physical Hazard - 0 (minimal hazard)  
PPE - see Note

Note: Lucas-Milhaupt Warwick, LLC 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: 29 December 2014

Date of Prior SDS: 14 April 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.