

Issue Date: April 23, 2019

SDS Version: 1.0

**Section 1: identification of the substance/preparation and of the company/undertaking****Product identifier: Lead-Free Solder Wire (SnBiAg)****Other means of identification:** Solder wire, SnBiAg solder**Supplier:**Voltera Inc.  
100-113 Breithaupt St.  
Kitchener, ON N2H5G9, Canada  
E-mail: [support@voltera.io](mailto:support@voltera.io)**Emergency Phone Number:**+1 613-996-6666  
International Emergency Number, CANUTEC  
This telephone number is available 24 hours per day, 7 days per week.**Section 2: Hazards Identification****Emergency Overview:** Exposure to soldering fumes may be irritating to eyes, respiratory system, and skin. Prolonged contact with flux and solder residues may cause skin irritation and sensitization.**Section 3: Composition/Information on ingredients**

Chemical Name	CAS Number	Concentration, %	Substance classification, schema and other instructions
Sn	7440-31-5	Bal.	Alloy (Homogeneous mixture)
Bi	7440-69-9	42±1.0	
Ag	7440-22-4	1.0±0.2	
Flux	8050-09-7	2.0~3.0	

**Section 4: First-aid measures****Inhalation:** Fumes given off by flux may cause irritation. If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.**Skin contact:** Wash hands with soap and water after handling solder. Seek immediate medical attention for serious burns.**Eye contact:** Immediately flush with water for 15-20 minutes. Seek medical attention if irritation persists.**Ingestion:** Drink plenty of water and seek immediate medical attention.**Section 5: Fire-fighting measures****Suitable firefighting methods and extinguishing media:** Use dry chemical powder fire extinguishing agent for small fires.**Special protective equipment and precautions for firefighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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#### Section 6: Accidental release measures

**Personal precautions, protective equipment, and emergency procedures:** Evacuate area. Avoid breathing fumes. Avoid contact with skin, eyes, and clothing.

**Environmental Precautions:** Avoid runoff into storm sewers, ditches, and waterways.

**Methods and materials for containment and cleaning up:** Melted solder will solidify on cooling and can be scraped up. Use caution to avoid breathing fumes if a gas torch is used to cut up large pieces.

#### Section 7: Handling and storage

**Handling:** Eliminate all ignition sources. Use in well-ventilated area. Wear appropriate personal protective equipment.

**Storage:** Not applicable.

#### Section 8: Exposure controls/personal protection

**Appropriate engineering controls:** Good general ventilation should be used.

**Eye/face protection:** Eye protection should be used.

**Skin protection:** Chemical-resistant gloves should be worn whenever this material is handled.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator should be worn.

#### Section 9: Physical and chemical properties

**Physical State:** Alloy wire

**Colour:** Silver white

**Odour:** Odourless

**pH:** No data available

**Melting point:** 139 °C

**Flash point:** No data available

**Explosion limit:** No data available

**Solubility:** No data available

#### Section 10: Stability and reactivity

**Stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** The product is stable under normal circumstances. Outgassing of harmful vapors may occur at temperatures higher than the melting point.

**Incompatible materials:** Mild reaction to strong oxidants, strong acids, strong bases or moisture.

**Hazardous polymerization:** None.

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#### Section 11: Toxicological information

**Animal toxicity:** LD50, LC50 data not available.

**Health hazards:** Contact with dust and fumes may cause skin, eye, and respiratory irritation. Prolonged exposure may cause allergic reactions or dermatitis.

#### Section 12: Ecological Information

No relevant information.

#### Section 13: Disposal Considerations

**Recommended disposal of waste and contaminated containers and packaging:** Compliance with national and local environmental regulations should be carried out by a licensed waste disposal company.

#### Section 14: Transport Information

According to international transport regulations, this product does not fall under any international embargo of dangerous substances.

#### Section 15: Regulatory Information

All ingredients used to manufacture this product are listed on the EPA TSCA inventory. Finished product is not listed on the EPA TSCA inventory.

US Federal Regulations: Not regulated

State Regulations: Not regulated

International Regulations: Not regulated

Australian Regulations: Not regulated

#### Section 16: Other Information

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##### Disclaimer Notice

This product is a complex mixture of liquids and solids. This SDS was prepared based upon the SDS of the raw materials used in the mixture.

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Additionally, Voltera Inc. assumes no responsibility for injury to the end user proximately caused by the material even if reasonable safety procedures are followed. The end user assumes the risk in their use of this material.