



# SAFETY DATA SHEET

According to Safe Work Australia

Printing date 22.05.2014

Revision: 22.05.2014

## 1 . IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

**Product Name:** SILVER SOLDER - Sn96.5/Ag3.5 (1.6mm - 15g - ACID CORE) - 211623**Recommended Use of the Chemical and Restriction on Use:** Acid flux core solder**Details of Manufacturer or Importer:**

Primus Australia Pty Ltd

3/20 Enterprise Drive

Bundoora VIC 3083

**Phone Number:** 03 9468 4400**Emergency telephone number:** National Poison Information Centre: 13 11 26

## 2 . HAZARDS IDENTIFICATION

**Hazardous Nature:** The product is not classified as hazardous according to the Globally Harmonized System (GHS).**Label Elements****Signal Word** Void**Hazard Statements** Void

## 3 . COMPOSITION AND INFORMATION ON INGREDIENTS

**Chemical Characterisation: Substances****CAS No. Description**

7440-31-5 tin 96.5%

**Chemical Characterization: Mixtures****Hazardous Components:**

7440-22-4	Silver	3.5%
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**Additional information:** Unlisted percentages are non-hazardous stabilizers, and water.

## 4 . FIRST AID MEASURES

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Contact with molten material will cause severe burns.

**Eye Contact:**

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention. Contact with molten material will cause severe burns.

**Ingestion:** Seek immediate medical attention.

## 5 . FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:**

Special mixtures of dry chemicals suitable for metal fires such as dry sand, dolomite, graphite, salt, and soda ash. Do not apply water to burning or melted metal.

**Specific Hazards Arising from the Chemical:**

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Harmful organic fumes and toxic oxide fumes may be formed at elevated temperatures.

The solid metal form is not a fire hazard. However, when material is in the form of dust and exposed to heat and flames may present a moderate fire or explosion hazard. Hazards also exist when this product is involved in chemical reactions or in contact with powerful oxidizers.

**Special Protective Equipment and Precautions for Fire Fighters:**

Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

## 6 . ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear Safe Work Australia approved safety glasses or goggles, rubber gloves and protective clothing (overall). Evacuate all non-essential personnel from affected area. Do not generate dust. Provide adequate ventilation.

**Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

**Methods and Materials for Containment and Cleaning Up:**

Pick up solids and put in container for reuse or recycling. Do not sweep, use vacuum. Reduce airborne dust by moistening with water. Provide adequate ventilation.

## 7 . HANDLING AND STORAGE

**Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Users should wear protective gloves and glasses when handling solder paste. Soldering should be conducted in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

**Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Protect from humidity. Keep away from strong oxidizing agents, acids and alkalies.

## 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Exposure Standards:****7440-31-5 tin**

NES	STEL: 0.2** mg/m <sup>3</sup> TWA: 2* 0.1** mg/m <sup>3</sup> *metal, oxide, inorg. comp.; **org. comp.(as Sn):Sk
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**7440-22-4 Silver**

NES	TWA: 0.1* 0.01** mg/m <sup>3</sup> *metal; **soluble comp. (as Ag)
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**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapour below occupational exposure standards.

**Personal Protective Equipment (PPE):****Respiratory Protection:**

Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. See Australian Standards AS/NZS 1715 and 1716 for more information.

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**Skin Protection:**

Rubber gloves and protective clothing. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 for more information.

**Eye and Face Protection:**

Safety glasses with top and side shields or goggles. See Australian Standards AS/NZS 1336 and 1337 for more information.

### 9 . PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:**

<b>Form:</b>	Solid metal
<b>Colour:</b>	White metallic
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	Not applicable
<b>pH-Value:</b>	Not applicable.
<b>Melting point/Melting range:</b>	221 °C
<b>Initial Boiling Point/Boiling Range:</b>	2250 °C
<b>Flash Point:</b>	Not applicable.
<b>Flammability:</b>	Product is not flammable.
<b>Auto-ignition Temperature:</b>	No information available
<b>Decomposition Temperature:</b>	No information available
<b>Explosion Limits:</b>	
<b>Lower:</b>	Not applicable
<b>Upper:</b>	Not applicable
<b>Vapour Pressure:</b>	Not applicable.
<b>Relative Density:</b>	7.1
<b>Vapour Density:</b>	Not applicable.
<b>Evaporation Rate:</b>	Not applicable.
<b>Solubility in Water:</b>	Insoluble

### 10 . STABILITY AND REACTIVITY

**Possibility of Hazardous Reactions:** Hazardous polymerisation will not occur.

**Chemical Stability:** Stable at ambient temperature and under normal conditions of use.

**Conditions to Avoid:** Humidity.

**Incompatible Materials:** Strong oxidizing agents, acids and alkalies.

**Hazardous Decomposition Products:**

Harmful organic fumes and toxic oxide fumes may be formed at elevated temperatures.

### 11 . TOXICOLOGICAL INFORMATION

**Toxicity:****LD<sub>50</sub>/LC<sub>50</sub> Values Relevant for Classification:****7440-22-4 Silver**Oral LD<sub>50</sub> >2000 mg/kg (rat)**Acute Health Effects**

**Inhalation:** Inhalation of fumes or dust may cause respiratory irritation.

**Skin:**

Contact with the molten core solder will cause skin burns. Fumes generated during soldering operations may be irritating to the skin.

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**Eye:**

Contact with the wire form of this product can be physically damaging to the eye. Contact with the molten core solder will cause burn to the eyes. Fumes generated during soldering operations or dust may cause moderate irritation, tearing, and reddening.

**Ingestion:** Harmful if swallowed.

**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.

**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.

**Respiratory or Skin Sensitisation:** No sensitising effects known.

**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.

**Carcinogenicity:** This product does NOT contain any IARC listed chemicals.

**Reproductive Toxicity:** Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

**Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

Based on classification principles, the classification criteria are not met.

**Aspiration Hazard:** Based on classification principles, the classification criteria are not met.

**Chronic Health Effects:**

Prolonged or repeated exposure to tin fumes can result in benign pneumoconiosis, which causes inflammation of the lungs, but there is no distinct fibrosis or evidence of disability.

Argyria, a blue-gray discoloration of the skin, mucous membranes, and eyes may result from inhalation of silver. This discoloration may become permanent.

**Existing Conditions Aggravated by Exposure:** No information available

**Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

### 12 . ECOLOGICAL INFORMATION

**Ecotoxicity:** No information available

**Aquatic toxicity:** No information available

**Persistence and Degradability:** No information available

**Bioaccumulative Potential:** No information available

**Mobility in Soil:** No information available

### 13 . DISPOSAL CONSIDERATIONS

**Disposal Methods and Containers:** Dispose according to applicable local and state government regulations.

**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

### 14 . TRANSPORT INFORMATION

**UN Number** Not regulated

**ADG, IMDG, IATA** Void

**Proper Shipping Name** Not regulated

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**ADG, IMDG, IATA** Void  
**Dangerous Goods Class** Not regulated  
**ADG Class:** Void  
**Packing Group:** Not regulated  
**ADG, IMDG, IATA** Void  
**Marine pollutant:** No

### 15 . REGULATORY INFORMATION

**Australian Inventory of Chemical Substances:**

7440-31-5	tin
7440-22-4	Silver

### 16 . OTHER INFORMATION

**Creation Date:** 22.05.2014**Prepared by:** MSDS.COM.AU Pty Ltd[www.msds.com.au](http://www.msds.com.au)**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
IARC: International Agency for Research on Cancer  
STEL: Short Term Exposure Limit  
TWA: Time Weighted Average  
NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

**Disclaimer**

This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - December 2011"

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