

## MATERIAL SAFETY DATA SHEET

### Section 1: IDENTIFICATION OF THE MATERIAL

**Product name:** Tin/Lead Solders – Medium Grade

**Part number:** P611001, P611002, P611003, P611004, P611005, P611007, P611009

**Other names:** N/A

**Recommended use:** Soldering - General

### Section 2: HAZARD IDENTIFICATION

Hazard Classification according to criteria of Worksafe Australia.

<u>Risk Phrase(s)</u>	R20/21	Harmful by inhalation and contact with skin.
	R22	Harmful if swallowed.
	R33	Danger of cumulative effects.
	R61	May cause harm to the unborn child.
	R62	Possible risk of impaired fertility.
<u>Safety Phrase(s)</u>	S13	Keep away from food, drink and animal feeding stuffs.
	S20/21	When using, do not eat, drink or smoke.
	S45	In case of accident or you feel unwell seek medical advice immediately.
	S53	Avoid exposure- obtain special instructions before use.

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Entity	Proportion	CAS Number
Tin	30 – 60%	7440-31-5
Lead	40 – 70%	7439-92-1
Antimony	0 – 3%	7440-36-0

### Section 4: FIRST AID MEASURES

Description of necessary measures according to route of exposure.

Ingestion:	Give plenty of water to drink; seek medical advice if a large object has been swallowed.
Eye:	Irrigate the affected eye(s) with water and seek medical advice to remove the foreign body if necessary.
Skin:	If molten material comes in contact with the skin and adheres: - cool quickly with running water – do not attempt to remove. For metal dust contamination, wash the affected area with soap and water.
Inhalation:	If fume or dust is inhaled, remove victim to fresh air taking care not to become a casualty. Lay patient down and keep warm and rested. Seek medical attention.
Medical Attention and Special Treatment:	Treat symptomatically.

Additional information

Aggravated Medical Conditions Caused by Exposure:	Test for lead in blood if patient has had long term exposure, particularly to dust or fume. Blood lead levels exceeding 100 ug/100ml indicate lead poisoning. Exposure of high levels of airborne or ingested lead may produce symptoms of anaemia, insomnia, weakness, constipation, nausea and abdominal pain. Women of child bearing age should avoid exposure to lead due to post natal effects. Over exposure to Tin and Antimony not expected.
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**Section 5: FIRE FIGHTING MEASURES**

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Extinguishing Media:	Dry Chemical Powder or Carbon Dioxide.
Hazardous Combustion Products:	Non Flammable.
Special Protective Equipment:	Fire fighters should wear self contained breathing apparatus and protective clothing if exposed to products of decomposition.
<u>Additional information</u>	Avoid contact with strong acids. Incompatibility: Avoid oxidising materials, acids and peroxides. Above 500°C lead fumes may be generated.
HAZCHEM CODE:	None Allocated

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**Section 6: ACCIDENTAL RELEASE MEASURES**

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Emergency Procedures:	Refer to protection measures listed in 7/8.
Methods and Materials for Containment and Clean Up Procedures	
Small Spills / Leaks:	In molten state allow to solidify and cool. Break up and recycle as scrap.
Large Spills / Leaks:	In molten state allow to solidify and cool. Break up and recycle as scrap. Seek advice of supplier. If necessary dam the spill area to prevent entry of molten metal to drains. Scrap solder by-products can be recycled by returning to supplier.

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**Section 7: HANDLING AND STORAGE**


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Precautions for Safe Handling: Good occupational practice should be followed when lifting or carrying lead. Always wear protective clothing and equipment when molten metal is present.

Conditions for Safe Storage: Material stable. Storage and transport should not present a problem.

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**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**


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National Exposure Standards – *as regulated by:* Worksafe Australia

Chemical Name	ES – TWA	ES - STEL	ES – Peak
Tin (Dust & Fume)	2 mg/m <sup>3</sup>		
Lead	0.15 mg/m <sup>3</sup>		
Antimony	0.5 mg/m <sup>3</sup>		

Biological Limit Values: No data available.

Engineering Controls: Adequate ventilation/extraction should be provided to keep exposure to below TWA values and to ensure operator comfort.

*Personal Protective Equipment (PPE)*

Eye / Face Protection: Safety Glasses or full face mask.

Skin Protection: Leather gloves, safety boots and protective clothing should be worn and kept clean. Always wash hands before eating, drinking, smoking or using the toilet.

Respiratory Protection: An approved dust/fume respirator should be worn when TWA values may be exceeded.

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**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**


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Appearance:	Silver/Grey Solid
Colour:	Silver/Grey
Odour:	Nil
Vapour Pressure:	N/A
Vapour Density:	N/A
Boiling Point:	N/A
Melting Point:	Composition of solders is variable, therefore none given.
Solubility in Water:	Insoluble
Specific Gravity:	Composition of solders is variable, therefore none given.
Flash Point:	N/A
pH:	N/A

*For Flammable Limits (as a percentage volume in air)*

Lower Explosion Limit :	N/A
Upper Explosion Limit :	N/A
Ignition Temperature:	N/A
Specific Heat Value :	N/A
Particle Size:	N/A
Volatile Organic Compounds (VOC) Content	N/A
Evaporation Rate :	N/A
Viscosity :	N/A
Percent Volatile :	N/A
Octanol/Water partition coefficient :	N/A
Saturated Vapour Concentration :	N/A
Additional Characteristics	N/A
Flame Propagation/Burning Rate of Solid Materials :	N/A
Properties of material that may initiate or contribute to fire intensity :	N/A
Potential for Dust Explosion :	Nil
Reactions that Release Flammable Gases :	Nil
Fast or Intensely Burning Characteristics :	N/A
Non-Flammables that could contribute unusual hazards to a fire :	None
Release of invisible flammable vapour and gases :	Nil
Decomposition Temperature :	N/A

Additional Information

Molecular Weight :	N/A
Solubility :	Insoluble

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## Section 10: STABILITY AND REACTIVITY

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Chemical Stability:	Stable under the handling and storage conditions listed in section 7.
Conditions to Avoid:	Avoid contact with strong acids.
Incompatible Materials:	Avoid oxidising materials, acids and peroxides.
Hazardous Decomposition Products:	None
Hazardous Reactions:	None

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## Section 11: TOXICOLOGICAL INFORMATION

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Toxicity Data:	No data available.
Ingestion:	Extremely Unlikely unless in the form of dust or fume. Lead is absorbed in small amounts from the gastrointestinal tract, which may enter through the swallowing of inhaled particles.
Eye:	Dust or metal particles may cause soreness or scratches of the eye.
Skin:	Hot metal burns.
Inhaled:	Unlikely due to physical form.

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**Section 12: ECOLOGICAL INFORMATION**

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Ecotoxicity:	The product has no effect on the environment unless in finely divided form.
Persistence / Degradability:	No data available.
Mobility:	No data available.
Environmental Fate:	No data available.
Bioaccumulative Potential :	No data available.

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**Section 13: DISPOSAL CONSIDERATION**

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Disposal Methods: Scrap should be recycled by returning to supplier. Do not dispose to landfill. Do not discharge into drains or water courses. Dispose of in accordance with all local, state and federal regulations at an approved waste disposal facility.

Special Precautions for Landfill or Incineration: Not Applicable

*The Disposal Considerations mentioned above applies to the material / product described in this MSDS as manufactured. Further processing, use, or contamination of the product may make the information inappropriate, inaccurate or incomplete.*

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**Section 14: TRANSPORT INFORMATION**

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UN Number:	None Allocated
UN Shipping Name:	N/A
Dangerous Goods Class:	None Allocated
Packing Group:	None Allocated
Special Precautions / Requirement:	N/A
HAZCHEM Code:	None Allocated

Additional Information –  
Material for Export: N/A

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**Section 15: REGULATORY INFORMATION**

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Poison Schedule Number:	None Allocated
EPG:	None Allocated
AICS Name:	N/A
NZ Toxic Substance:	N/A

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**Section 16: OTHER INFORMATION**

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**Date of Preparation/last Revision of the MSDS : 6<sup>th</sup> November 2015**

New Zealand Emergency Telephone: 111

New Zealand National Poisons Centre Telephone: 0800 POISON (0800 764 766)

The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and to develop work practice procedures for a safe work environment.

**DISCLAIMER:** The information contained herein, is to the best of our knowledge and belief; accurate. However, because the condition of handling and use are beyond our control, **we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all federal, state and local laws and regulations.**