


**MATERIAL SAFETY DATA SHEET FOR CAPSOL
LEADED SOLDER WIRE**

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product type:	Solder wire containing Lead
Intended use:	Soldering
Trade Name:	Capsol Leaded Solder Wire
Supplier of product:	Heaps, Arnold & Heaps Ltd
Registered Office:	Quintec Court, Barbot Hall Industrial Estate, Rotherham, South Yorkshire, S61 4RN
Telephone/Fax Numbers:	01709 837669 / 01709 837671
E-mail Address	heaps@heapsarnold.com
Web site Address	www.heapsarnold.com

2. HAZARD IDENTIFICATION

2.1 LEAD	
Label Elements	
Hazard Pictograms	
	
Signal Word:	Danger
Hazard Statements:	
H332	Harmful if inhaled
H410	Very toxic to aquatic life with long lasting effects
H373	May cause damage to organs through prolonged or repeated exposure
H302	Harmful if swallowed
H360Df	May damage the unborn child. Suspected of damaging fertility
Precautionary Statements:	
P281	Use personal protective equipment as required
P260	Do not breathe dust/fume/gas/vapours/spray
P273	Avoid release to the environment
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P304 + P340	IF INHALED: remove to fresh air and keep at rest in a position comfortable for breathing
<p>Lead is considered moderate to high toxicity. In the wire form as solid it is unlikely to be considered a health hazard. However, lead fumes may be produced when the material is melted and lead will be present in any dross dust. Lead can lead to possible systemic effects and long-term effects as it is considered a cumulative poison.</p>	

2. HAZARD IDENTIFICATION (cont.)

2.1.1 Inhalation:	
2.1.2 Ingestion:	Constipation, abdominal pain nausea
2.1.3 Skin contact:	Unlikely to cause a problem
2.1.4 Eye Contact:	Unlikely to cause a problem
2.1.5 Long Term Exposure Effects:	Lead and its compounds may also cause damage to the central nervous system, nervous, gastrointestinal disturbances, anaemia and wrights drop. Kidney dysfunction and possible injury has been associated with Chronic Lead poisoning.

2.2 ANTIMONY

Hazard Pictograms



Signal Word: Warning

Hazard Statements:

H335 May cause respiratory irritation

Precautionary Statements:

P262 Do not get in eyes, on skin or on clothing

Antimony is present in low quantities. In its present form it is unlikely to be considered a hazardous. However, when melted, fumes may be given off which are considered hazardous. Antimony will be present in any gross dusts and may be ingested or inhaled. Antimony will react with concentrated acids to form Stibine, which is highly toxic. Antimony may cause the following symptoms.

2.2.1 Inhalation: May cause sore throat shortness of breath.

2.2.2 Ingestion: Corrosive, abdominal pain or nausea.

2.2.3 Skin contact: Unlikely to cause a problem.

2.2.4 Eye contact: Unlikely to cause a problem.

2.2.5 Long term exposure effects: May cause pulmonary oedema, lung fibrosis.

Tin

This substance is not classified as hazardous to health or the environment according to regulation (EC) 1272/2008 [CLP]

CAPSOL (LEADED) MSDS – 003 REVIEWED: 16/03/2017

3. COMPOSITION/INFORMATION ON INGREDIENTS.

Alloy Ingredients	%	CAS-NO	Hazard
Lead-Pb	BAL.	7439-92-1	R61 May cause harm to an unborn child. R20/22 Harmful by inhalation and if swallowed. R33 Danger of cumulative effects. R62 Possible risk of impaired fertility.
Tin-Sn	25.00-28.00	7440-31-5	Non-reported
Antimony-Sb	1.00 – 1.80	7440-36-0	R20/22 Harmful by inhalation and if swallowed. R61/53(2) Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

4.1 Inhalation:	Bring subject into fresh air
4.2 Ingestion:	Do not induce vomiting, seek medical advice
4.3 Skin contact:	Wash with water and soap
4.4 Eye contact:	Flush eye with running water for at least 15 minutes

5. FIRE FIGHTING MEASURES

The wire, ingots or sticks are not considered flammable, however in the event of a fire affecting the material the following measures should be taken:	
5.1 Suitable Extinguishing media:	Dry foam, sand, CO ₂ . Special powder for metal fires
NOT Suitable Media:	Never use water near any molten metal

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions:	Not applicable
6.2 Environmental Precautions:	Keep in dry location away from concentrated acids.
6.3 Method for Clean Up:	Sweep or pick up.

7. HANDLING AND STORAGE:

7.1 Storage Conditions:	Scrap dross disposed of in closed containers
7.2 Handling Precautions:	Do not intake vapour/fumes during soldering. Do not inhale and avoid contact with dross. Eating, smoking and drinking should be prohibited on the shop floor areas likely to be contaminated with Lead. Good personal hygiene must be maintained at all times.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Limits		
Ingredient	Workplace Exposure Limit	
	Long-term exposure limit (8hour TWA reference period) mg/m3	Short-term exposure limit (15-minute reference period) mg/m3
Lead- Pb	0.15	-
Tin - Sn	2	4
Antimony- Sb	0.5	-

8.2 Controls and Personal Protection	
Eye Protection:	Goggles or visor to be worn to protect against molten metals
Respiratory Protection:	To be used to avoid inhaling vapor / fumes during soldering.
Skin Protection:	Gloves and overalls to be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Chemical Data	
9.1 Appearance:	Silver/Grey coloured wire
9.2 Odour:	None
9.3 Melting Point:	185-248 Degree Centigrade.
9.4 Boiling Point:	Not applicable.
9.5 Flash Point:	Not applicable.
9.6 Auto-flammability:	Not applicable.
9.7 Density:	9.60 g/cm3
9.8 Explosion Limits:	Not applicable.
9.9 Solubility in Water:	Not soluble.
9.10 pH-Value:	Not applicable.
9.11 Viscosity:	Not applicable.

10. STABILITY AND REACTIVITY

10.1 Conditions to Avoid:	None
10.2 Materials to Avoid:	Avoid water and acids when the metal is molten
10.3 Hazardous decomposition:	In contact with concentrated acids, toxic gases may be given off

11. TOXICOLOGICAL INFORMATION

Toxicological data:	<p>Lead poisoning is one of the commonest occupational diseases. Mode of entry is by inhalation, ingestion via food, fingers or tobacco. Lead is a cumulative poison. Lead adversely affects the blood cells.</p> <p>(N.I. Sax, Dangerous Properties of Industrial Materials 7th Edition).</p>
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12. ECOLOGICAL INFORMATION

12.1 Mobility:	In the solid form not considered mobile. Dross will be considered mobile and capable of effecting the environment.
12.2 Persistence and degradability: Biological Oxygen Demand: Chemical oxygen Demand:	All heavy metals are considered persistent Not applicable Not applicable
12.3 Aquatic toxicology:	In form sold not applicable. Dross could be taken up by all aquatic organisms

13. DISPOSAL CONSIDERATIONS

Waste disposal is subject to a Duty of Care and the Waste Management Licensing Regulations.
Drosses will be subject to the Hazardous Waste Regulations.

14. TRANSPORT INFORMATION

Not subject to the Dangerous Goods Regulations, ADR.

15. REGULATORY INFORMATION

15.1 Classification:		
Lead	Repr Cat I - Toxic for reproduction Category 1	R61, R20/22, R33, R62, R50, R53
Antimony	Xn - Harmful, N - Dangerous for the environment	R20/22, R51/53

Risk & Safety Phrases:

LEAD	
R61	May cause harm to the unborn child.
R62	Possible risk of impaired fertility.
R20/22	Harmful by inhalation, and If swallowed.
R33	Danger for cumulative effects.
R50/53	Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
S53	Avoid exposure.
S45	In case of accident or If you unwell seek medical advice immediately. (Show label where possible).
S61	Avoid release to the environment

Antimony:

R20/22:	Harmful by inhalation, in contact with skin.
R51/53:	Toxic to aquatic organism, may cause long term adverse effects In the aquatic environment.
S2	Keep out of reach of children.
S61	Avoid release to the environment.

This information does not constitute the users own assessment of workplace risk as required by H&S legislation.

16. OTHER INFORMATION

16.1 EH40/ 2005	Workplace Exposure Limits
16.2 CHIP	Chemical (Hazard Information and Packaging for Supply) Regulations
16.3 HSE (COSHH)	Control of Substances Hazardous to Health Regulations
16.4 CLAW Regulations	Control of Lead at Work Regulations
16.5 HSG 122	New and Expectant Mothers at Work: A Guide for Employers
16.6 HSG 165	Young People at Work: A Guide for Employers
16.7 INDG 305	Lead and You
16.8 L 132	Control of Lead at Work: ACOP and Guidance
16.9 EH 19	Antimony: Health & Safety Precautions
16.10 EH 65/23	Antimony and its compounds

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.