

Safety Data Sheet



1. Product and Company Identification

Product Name Solder
Alloy composition Lead-free Sn99.3/Cu0.7

Supplier Premier Farnell plc
150 Armley Road
Leeds
LS12 2QQ
+44 (0) 870 129 8608

Emergency Telephone Numbers +44 1865 407333

2. Hazards Identification

Physical State and Appearance Solder

Emergency Overview Warning !



Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

Routes of Entry Inhalation. Ingestion.

Potential Acute Health Effects

Eyes May be causing irritant in case of eye contact

Skin This product may be hazardous in case of skin contact (irritant, sensitizer). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation Fumes and/ or dusts produced by this product may be hazardous in case of inhalation.

Ingestion This product may be hazardous in case of ingestion.

Potential Chronic Health Effects Chronic effects: Fumes and /or dusts produced by this product may be hazardous in case of ingestion, of inhalation. This product may be hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant). Non- corrosive for skin. Non-permeator by skin.

Medical Conditions

Aggravated by Overexposure Repeated or prolonged exposure is not known to aggravate medical condition.

Overexposure/ Signs/ Symptoms N/A

3. Hazardous Ingredients

Hazardous Components			CAS. No.	TWA	STEL	CEILING	LD 50	LC 50
Common Name	Chemical Formula	Weight %						
Tin	Sn	99.3	7440-31-5	2	4	N/A	N/A	N/A



Safety Data Sheet



Hazardous Components			CAS. No.	TWA	STEL	CEILING	LD 50	LC 50
Common Name	Chemical Formula	Weight %						
Silver	Ag	-	7440-22-4	0.01	0.03	N/A	N/A	N/A
Copper	Cu	0.7	7440-50-8	0.2	N/A	N/A	N/A	N/A
Antimony	Sb		7440-36-0	0.5	1.5	N/A	N/A	N/A
Rosin	-	2.5~3.0	8050/9/7	0.1	N/A	N/A	N/A	N/A

4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Hazardous Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Hazardous Inhalation Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Hazardous Ingestion	N/A
Notes to Physician	N/A

5. Fire Fighting Measures

Suitable extinguisher	Dry powdered type Under high-temperature condition, do not use water: Not applicable. Fire fighters must wear special protective equipment
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6. Accidental Release Measures

Small Spill and Leak	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill and Leak	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

7. Handling and Storage

Handling	Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.



Safety Data Sheet



8. Exposure Controls, Personal Protection

Engineering Protection Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Eyes Splash goggles.
Body Lab coat.
Respiratory Dust respirator. Be sure to use an approved/ certified respirator or equivalent. Wear appropriate respirator when ventilation.
Hands Gloves.
Feet Not applicable.

Note: Suggested protective clothing may not be adequate for a specific process. Consult a specialist before using.

Personal Protection in case of a large Spill

Splash goggles. Full Suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

9. Physical and Chemical Properties

Physical State and Appearance Solid grey color
Smell Odorless
Chemical Formula Not applicable.
pH(1% Soln/ Water) Not applicable.
Acid Value Not available.
Boiling/ Condensation Point Not available.
Melting/ Freezing Point 227°C
Critical Temperature Not available.
Vapor Pressure Not applicable.
Vapor Density Not available.
Volatility Not available.
Odor Threshold Not available.
Odor Not available.
Taste Not available.
Color silver-grey.
Specific Gravity 7.38 (water =1)
Evaporation Rate Not available.
VOC Not available.
Viscosity Not available.
LogKow The product is insoluble in water and oil.



Safety Data Sheet



Ionicity (In Water)	Non-ionic
Dispersion Properties	Is not dispersed in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.
Solubility	Insoluble
Physcial Chemical Comments	Not available.

10. Stability and Reactivity

Stability and Reactivity	This product is stable.
Conditions of Instability	Stable in normal conditions. Over melting point, will emit toxic tin oxides. (Tin)
Incompatibility with Various Substances	Slightly reactive with oxidizing agents, acids, moisture.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Will not occur.
Corrosivity	Not considered to be corrosive for matals and glass according to our database.
Special Remarks on Corrosivity	Not available.

11. Toxicological Information

Toxic and Chronic Effects on Humans	<p>Fumes and/or dusts produced by this product may be hazardous in case of ingestion, of inhalation. This product may be hazardous in case of skin contact (irritant, sensitizer), of eye contact (irritant). Non- corrosive for skin. Non-permeator by skin.</p> <p>Mutagenic Effects: Not available.</p> <p>Teratogenic Effects: Not available.</p> <p>Developmental Toxicity: Not available.</p> <p>The product may be toxic to kidneys, lungs, liver, mucous membranes, upper respiratory tract, skin, eye, lens or cornea.</p> <p>Repeated or prolonged exposure to the substance can produce target organs damage.</p>
Toxicity to Animals	<p>LD50: N/A</p> <p>LC50: N/A</p>
Special Remarks on Chronic Effects on Humans	Prolonged and repeated exposure to tin oxyde fumes may result in benigne pneumoconiosis (stannosis). (Tin)
Chronic Effects on Humans	<p>N/A</p> <p>Developmental Toxicity: N/A</p>
Special Remarks on Other Toxic Effects on Humans	MOLTEN METAL can cause severe Burns! Fumes and dust may irritate eyes, digestive system and respiratory tract. (Tin)
Special Remarks on Toxicity on Animals	No additional remark

12. Ecological Information

Ecotoxicity	Unknown
BOD5 and COD	Unknown



Safety Data Sheet



Biodegradable/ OECD	Unknown
Mobility	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	N/A

13. Disposal considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste stream	N/A
Consult your local or regional authorities.	

14. Transport Information

UN Number:	None
UN Transportation name:	IATA-Dangerous goods regulations
Classification:	Non-DOT restrictive material
Packing class:	None
Ocean pollution:	No
Special transport methods and remarks:	N/A

15. Regulatory Information

- Compliant to Labor/Sanitary Regulations
- Standards of labor working environment regulating air density of hazardous materials
- Standards of waste handling and storage
- Identification rules on hazardous materials
- Safety rules of road transportation.

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