

# 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



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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

## 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.



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## 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.



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

## 10. Stability and Reactivity

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

## 11. Toxicological Information

<b>Toxic and Chronic Effects on Humans</b>	<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>
<b>Toxicity to Animals</b>	<p>LD50: N/A</p> <p>LC50: N/A</p>
<b>Special Remarks on Chronic Effects on Humans</b>	Prolonged and repeated exposure to tin oxyde fumes may result in benigne pneumoconiosis (stannosis). (Tin)
<b>Chronic Effects on Humans</b>	<p>N/A</p> <p>Developmental Toxicity: N/A</p>
<b>Special Remarks on Other Toxic Effects on Humans</b>	MOLTEN METAL can cause severe Burns! Fumes and dust may irritate eyes, digestive system and respiratory tract. (Tin)
<b>Special Remarks on Toxicity on Animals</b>	No additional remark

## 12. Ecological Information

<b>Ecotoxicity</b>	Unknown
<b>BOD5 and COD</b>	Unknown



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

## 13. Disposal considerations

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

## 14. Transport Information

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

<b>Part Number</b>
21-1042

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