

# Lead Free Solders and Fusible Alloys

A solder is a fusible metal alloy which is melted to join metallic surfaces. When heated to suitable temperature with a suitable flux or under protective atmosphere, the powder melts and flows between closely fitted surfaces of the joint by capillary action. **ACuPowder** is pleased to offer a wide variety of lead free solders and fusible alloys with a wide range of melting points and melting behaviors to match your process while avoiding the environmental and health issues of traditional lead based products.

## Tin / Antimony and Tin / Silver Solders

Grade	95 Sn / 5 Sb	9649
<b>Composition</b>	95 Sn; 5 Sb	96.5 Sn; 3.5 Ag
<b>Apparent Density, g/cc</b>	4	4.1
<b>Nominal Mesh</b>	-325	-325
<b>Solidus, °C</b>	452	430
<b>Liquidus, °C</b>	464	430

## Tin / Bismuth Fusible Alloys

### Tin / Copper Solders

Grade	5788	5794
<b>Composition</b>	97 Sn; 3 Cu	96 Sn; 3 Cu; 1 Bi
<b>A.D. g/cc</b>	3.2	3.5
<b>Nominal Mesh</b>	-325	-325

Grade	5800	XP1715
<b>Composition</b>	50 Sn; 50 Bi	43Sn, 57Bi
<b>A.D. g/cc</b>	4.89	4.78
<b>Nominal Mesh</b>	-325	-325
<b>Solidus, °C</b>	139	139
<b>Liquidus, °C</b>	160	139

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**ISO 9001**

*From industry pioneer to industry leader,  
We are innovation in motion*

**ISO 14001**

### ACuPowder International, LLC

901 Lehigh Avenue, Union NJ 07083 USA  
Phone: (908) 851-4500 X590 Customer Service.  
X521 Technical Service  
Fax: (908) 851-4597

**ACuPowder**

[www.acupowder.com](http://www.acupowder.com)

### ACuPowder TN, LLC

6621 Highway 411 S, Greenback, TN 37742  
Phone: (865) 856-3021 x112  
Fax: (865) 856-3083

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