

# ALPHA<sup>®</sup> Sn10Pb90

## High Temperature Leaded Alloy

### DESCRIPTION

**ALPHA Sn10Pb90** is manufactured using high purity raw materials and the alloy is conditioned using Alpha's Vaculoy viscosity and dross lowering treatment. This results in a pure low dross high fluidity solder alloy, which is free of cast in impurities and included oxides.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### TECHNICAL DATA

Material Property	Units	ALPHA Sn10Pb90
Solidus	Celsius	268
Liquidus	Celsius	302
Density	g/cc	10.8
Tensile Strength, Ultimate	MPa	30
Tensile Strength, Yield @Strain 0.200%	MPa	25
Elongation at Break (in 50mm)	%	10%
Electrical Resistivity	Ω.m	0.0021
CTE, linear	µm/m - °C	27.9
Thermal Conductivity	W/m-K	35.8

**SOLDER IMPURITIES SPECIFICATION**

Element	Specification %
Sn	<b>10.00 ± 1.00</b>
Pb	<b>Balance</b>
Cu	<b>0.08 max</b>
As	<b>0.02 max</b>
Bi	<b>0.25 max</b>
Zn	<b>0.005 max</b>
Fe	<b>0.02 max</b>
Ag	<b>0.015 max</b>
Sb	<b>0.50 max</b>
Cd	<b>0.001 max</b>
Al	<b>0.005 max</b>

**AVAILABILITY**

ALPHA Sn10Pb90 is available in 50LB/Box bar.

**RECYCLING SERVICES**

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area or [link here](#).



**SAFETY & WARNING**

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available at [MacdermidAlpha.com/assembly-solutions/knowledge-base](http://MacdermidAlpha.com/assembly-solutions/knowledge-base).**

**CONTACT INFORMATION**

**To confirm this document is the most recent version, please contact [Assembly@MacDermidAlpha.com](mailto:Assembly@MacDermidAlpha.com)**

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

<p><b>North America</b> 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460</p>	<p><b>Europe</b> Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400</p>	<p><b>Asia</b> 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong 852.3190.3100</p>
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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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