

ALPHA® SN100

Pure Tin Solder Alloy

DESCRIPTION

ALPHA Sn100 Pure Tin Solder Alloy is suitable for lead tinning, electronic plating, wave soldering and other applications for electronic assemblers interested in instituting a lead-free process. It is also suitable for replenishing the solder loss in Lead-Free solder pot to control / maintain the copper content when necessary. As with all Alpha Bar Solders, Alpha's proprietary alloying process is used to remove certain impurities, particularly oxides.

Alpha's proprietary process is a highly effective method for removing included oxides from solder. This is extremely important because included oxides generate excessive drossing and increase the viscosity of the solder. Solder with higher viscosity can result in increased soldering defects (i.e., solder bridging).

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

PRODUCT INFORMATION

0.10% of Pb complies with the requirement of RoHS Directive (Article 4.1 of the European Directive 2011/65/EU). Alloy specification for maximum Lead (Pb) Content = 0.05%

Element	Specification%	Element	Specification%
Sn	Balance	Cd	0.002 max
Sb	0.05 max	Zn	0.001 max
Cu	0.05 max	Fe	0.010 max
As	0.03 max	Pb	0.050 max
Ag	0.015 max	Al	0.001 max
Bi	0.050 max	In	0.10 max
Ni	0.010 max	Au	0.002 max

TECHNICAL DATA

Item	Typical Values
Melting Point (°C)	232
Density (g/cm ³)	7.29
Thermal Conductivity (W/mK)	73
Electrical Resistivity (μΩ-m)	0.124
Tensile Strength (kgf/cm ²)	135

AVAILABILITY

ALPHA Sn100 is available in 1kg (2.2lb) Bar, Chunks, Feeder Ingots and Autofeed Wire.

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.**

STORAGE

Store the solder bar in a cool, dry and non-corrosive environment. Wrap up the solder bar when not in use to reduce exposure to environment.

CONTACT INFORMATION

**To confirm this document is the most recent version, please contact
 Assembly@MacDermidAlpha.com
www.macdermidalpha.com**

<p>North America 109 Corporate Blvd. South Plainfield, NJ 07080, USA 1.800.367.5460</p>	<p>Europe Unit 2, Genesis Business Park Albert Drive Woking, Surrey, GU21 5RW, UK 44.01483.758400</p>	<p>Asia 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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