MacDermid Alpha ELECTRONICS SOLUTIONS

TECHNICAL DATA SHEET

KESTER® LEAD-FREE SOLID SOLDER WIRE

for High Reliability Soldering

DESCRIPTION

For soldering applications that require maximum reliability of solder joints, especially for surface mounted components, through hole and final assembly, only solder of the highest purity is acceptable. MacDermid Alpha does not make any vague claims of understanding solder purity. Only the highest quality metals are used to make Kester Solder Wire. Complete analysis of Kester Solder Wire prove that every batch conforms to the strictest quality controls in the solder industry.

MAXIMUM ALLOWED IMPURITIES

Kester Solder Wire meets IPC Specifications J-STD-006C Amendment 1.

Element	Symbol	ANSI/IPC J-STD-006C
Silver	Ag	0.100 or component
Copper	Cu	0.080 or component
Antimony	Sb	0.200 or component
Gold	Au	0.050
Aluminum	Al	0.005
Cadmium	Cd	0.002
Zinc	Zn	0.003
Bismuth	Bi	0.100 or component
Arsenic	As	0.030
Iron	Fe	0.020
Nickel	Ni	0.010
Indium	In	0.100
Lead	Pb	0.070

The component elements in each alloy shall deviate from their nominal mass percentage by not more than 0.020% of the alloy mass when their nominal percentage is <0.10%; by not more than 0.10% of the alloy mass when their nominal per- centage is >0.10% to <1.0%; by not more than 0.20% of the alloy mass when their nominal percentage is >1.0% to <5.0% or by not more than 0.50% when their nominal percentage is >5.0%.

Kester solder purchased directly or through stocking distributors will conform to these requirements. Only highest purity virgin metals are used to make Kester Lead-Free Solder Wire. There is no requirement that antimony must be included in solder. DOD-STD-2000-1A (Soldering Technology High Quality/High Reliability) states that it is the responsibility of the manufacturer to select those materials and processes that will produce acceptable high quality/high reliability products.

ROHS COMPLIANCE

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive.

AVAILABILITY

Alloy	Melting Point
Sn96.5Ag3.5	221 °C (430 °F)
Sn96.5Ag3.0Cu0.5	217 to 220 °C (423 to 428 °F)
Sn100	232 °C (450 °F)
K100LD	226 to 230 °C (438 to 446 °F)
Sn97Ag3	221 to 224 °C (430 to 435 °F)
Sn95Ag5	221 to 245 °C (430 to 473 °F)
Sn95Sb5	232 to 240 °C (450 to 464 °F)
Sn96.3Ag3.7	221 °C (430 °F)
Sn97Ag0.2Sb0.8Cu2	220 to 234 °C (428 to 454 °F)

Other lead-free alloy compositions may be available. Consult your local MacDermid Alpha Sales Representative.

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.

STORAGE, HANDLING AND SHELF LIFE

See ALPHA and Kester Solid Solder Storage, Handling and Shelf Life document for more information.

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.**

CONTACT INFORMATION

www.macdermidalpha.com

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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