



Lead-Free Solid Solder Wire for High Reliability Soldering

Product 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. Kester 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 percentage 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. Additional RoHS information is located at <https://www.kester.com/downloads/environmental>.

Availability

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

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

Storage and Warranty Period

Storage must be in a dry, non-corrosive environment between 10-40°C (50-104°F). The surface may lose its shine and appear a dull shade of grey. This is a surface phenomenon and is not detrimental to product functionality. Solid solder wire has a limited warranty period determined by the alloy used in the wire. For alloys containing more than 70% lead, the warranty period is 2 years from the date of manufacture. Other alloys have a warranty period of 3 years from the date of manufacture.

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet (SDS) and warning label before using this product.