

Leaded 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 proves 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 |
|----------|--------|---------------------|
| Antimony | Sb | 0.200 |
| Copper | Cu | 0.080 |
| Gold | Au | 0.050 |
| Aluminum | Al | 0.005 |
| Cadmium | Cd | 0.002 |
| Zinc | Zn | 0.003 |
| Silver | Ag | 0.100 |
| Bismuth | Bi | 0.100 |
| Arsenic | As | 0.030 |
| Iron | Fe | 0.020 |
| Nickel | Ni | 0.010 |
| Indium | In | 0.100 |

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 wire. 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

Kester does not determine any applicable Restriction of Hazardous Substances (RoHS) exemptions for our lead containing products at the user level.

Availability

| Alloy | Melting Point |
|----------------|-------------------------------|
| Sn63Pb37 | 183 °C (361 °F) |
| Sn60Pb40 | 183 to 190 °C (361 to 374 °F) |
| Sn50Pb50 | 183 to 212 °C (361 to 414 °F) |
| Sn40Pb60 | 183 to 238 °C (361 to 460 °F) |
| Sn5Pb93.5Ag1.5 | 296 to 301 °C (565 to 574 °F) |
| Sn5Pb95 | 301 to 314 °C (574 to 597 °F) |

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

Storage, Handling and Shelf Life

Storage must be in a dry, non-corrosive environment between 10 to 40 °C (50 to 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 shelf life determined by the alloy used in the wire. For alloys containing more than 70% lead, the shelf life is 2 years from the date of manufacture. Other alloys have a shelf life 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 and warning label before using this product. Safety Data Sheets are available at <https://www.kester.com/downloads/sds>.

Contact Information

To confirm this document is the most recent version, please contact Assembly@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

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