



E-Bar Oxide Free Extruded Bar Solder

Lead-bearing and Lead-free alloys

Product Description

Complicated electronic assemblies and printed circuit boards require not only conformance to industry material specifications, but also alloys completely free of non-metallic oxides. Kester, in cooperation with the electronics industry, designed and developed Kester E-Bar. It is the answer to thorough metallic continuity, increased fluidity, and reduced surface tension. Electronic assembly engineers, who have depended on Kester for answers to their soldering problems throughout the years, now are assured of the highest quality soldering of printed circuit boards and electronic assemblies.

Maximum Allowed Impurities

Kester E-Bar substantially exceeds the requirements of current industry standards for allowable impurity requirements.

Element	J-STD-006	Kester E-Bar	Kester Ultrapure®	Ultra Low Dross	Ultrapure® HAL
Copper	0.080	0.020	0.015	0.015	0.001
Gold	0.050	0.002	0.002	0.002	0.001
Antimony	0.050	0.050	0.050	0.050	0.010
Cadmium	0.002	0.001	0.001	0.001	0.001
Zinc	0.003	0.001	0.001	0.001	0.001
Aluminum	0.005	0.002	0.002	0.002	0.001
Iron	0.020	0.010	0.010	0.010	0.003
Arsenic	0.030	0.020	0.020	0.020	0.001
Bismuth	0.100	0.025	0.020	0.020	0.003
Silver	0.100	0.003	0.002	0.002	0.001
Nickel	0.010	0.002	0.002	0.002	0.001
Indium	0.100	0.007	0.007	0.007	0.002
Lead	0.100	0.050	0.050	0.050	0.050

Kester bar solder will conform to these requirements when purchased directly or through stocking distributors. Only the highest purity virgin metals are used to make Kester E-Bar. Kester is the only manufacturer of E-Bar quality solder. Kester E-Bar meets or exceeds Industry Specification ASTM B32. Kester E-Bar conforms to the requirements of J-STD-006 formerly QQ-S-571F. 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.

Available Alloys

	Melting Point
Lead-bearing	
Sn63Pb37	183°C (361°F)
Sn60Pb40	183-190°C (361-374°F)
Lead-free	
Sn95Sb05	232-240°C (450-464°F)
Sn96.5Ag3.5	221°C (430°F)
Sn96.5Ag3.0Cu0.5	217-220°C (423-428°F)
Sn95.5Ag3.8Cu0.7	217-221°C (423-430°F)
Sn99.3Cu0.7	227°C (441°F)
Sn100	232°C (450°F)

Storage and Shelf Life:

Kester E-Bar has no limited shelf life when handled properly. Storage must be in a dry, non-corrosive environment. The solder surface may lose its shine and appear a dull shade of gray. This is a surface phenomenon and is not detrimental to product functionality.

Health & Safety:

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

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The data recommendations presented are based on tests, which we consider reliable. Because Kester has no control over the conditions of use, we disclaim any responsibility connected with the use of any of our products or the information presented. We advise that all chemical products be used only by or under the direction of technically qualified personnel who are aware of the potential hazards involved and the necessity for reasonable care in their handling. The technical information contained herein is consistent with the properties of this material but should not be used in the preparation of specifications as it is intended for reference only. For assistance in preparing specifications, please contact your local Kester office for details.