

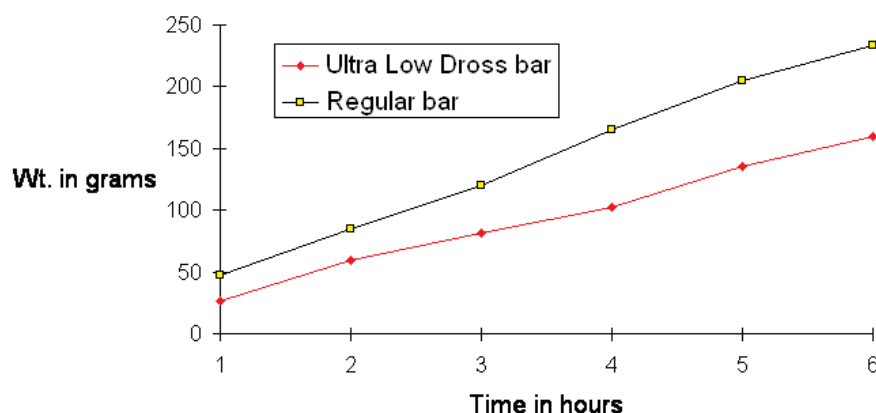
Ultra Low Dross

Extruded Bar Solder Using Low Dross Technology

Product Description

Kester Ultra Low Dross Bar Solder was developed to provide lower dross in wave solder, selective solder and dip solder processes. This product is a step above our Ultrapure® line of bar solder.

Dross weight comparison



Results are based on an "in-house" experiment using an aerated 2000 gram solder pot at 260°C (500°F).

Available Alloys with Low Dross Properties

Sn63Pb37

Process Information

Many solder impurities have been known to contribute to dross formation. Kester Ultra Low Dross integrates low dross technology with Kester's extruded bar manufacturing process. To minimize oxidation and alloy segregation, Kester pours and quick chills ingots of solder alloy. The ingot is inserted into an airtight hydraulic press which then extrudes bars in a highly efficient and automated manner.

Kester suggests, as with all our products, that this is purchased directly or through stocking distributors. Kester is the only manufacturer of Ultrapure and Ultrapure Low Dross quality solder. Both conform to the requirements of J-STD-006C (formerly QQ-S-571F).

Maximum Allowed Impurities

Ultrapur meets the requirements of current industry standards for allowable impurity requirements.

Element	J-STD-006C	Kester Ultrapur	Ultra Low Dross
Tin	Component	63.500	63.500
Lead	Component	Balance	Balance
Antimony	0.200	0.200	0.050
Copper	0.080	0.080	0.015
Gold	0.050	0.050	0.002
Aluminum	0.005	0.005	0.002
Cadmium	0.002	0.002	0.001
Zinc	0.003	0.003	0.001
Silver	0.100	0.100	0.050
Bismuth	0.100	0.100	0.020
Arsenic	0.030	0.030	0.020
Iron	0.020	0.020	0.010
Indium	0.100	0.100	0.007
Nickel	0.010	0.010	0.002

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. Except where otherwise indicated, the component elements in each alloy shall deviate from their nominal mass percentage by not > 0.10% of the alloy mass when their nominal percentage is $\leq 1.0\%$; by not > 0.20% of the alloy mass when their nominal percentage is > 1.0% to $\leq 5.0\%$ or by not > 0.50% when their nominal percentage is > 5.0%.

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. Solder bar has a limited warranty period determined by the alloy used in the bar. 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 health or the environment. Read the Material Safety Data Sheet and warning label before using this product.