



Ultrapure® SAC305 Sn96.5Ag3.0Cu0.5

Lead-free alloy

Product Description

For soldering applications which require maximum reliability of solder joints, especially for surface mounted components, only solder of the highest purity is acceptable. Kester does not make any vague claims of outstanding solder purity. Complete analysis of Kester Ultrapure® SAC305 Bar Solder proves that every batch conforms to the strictest quality control standards in the solder industry.

Maximum Allowed Impurities

Kester Ultrapure® SAC305 meets the requirements of current industry standards for allowable impurity requirements. Elements are considered impurities if they are not listed as components in the composition of the alloy.

Element	Symbol	J-STD-006C	Kester Ultrapure®
Tin	Sn	0.25	0.2500
Lead	Pb	0.07	0.0700
Antimony	Sb	0.20	0.2000
Copper	Cu	0.08	0.0800
Gold	Au	0.05	0.0500
Aluminum	Al	0.005	0.0050
Cadmium	Cd	0.002	0.0020
Zinc	Zn	0.003	0.0030
Silver	Ag	0.10	0.1000
Bismuth	Bi	0.10	0.1000
Arsenic	As	0.03	0.0300
Iron	Fe	0.02	0.0200
Indium	In	0.10	0.1000
Nickel	Ni	0.01	0.0100

Kester Ultrapure® SAC305 bar solder will conform to these requirements when purchased directly or through stocking distributors. Kester is the only manufacture of Ultrapure® quality solder. Kester Ultrapure® conforms to the requirements of J-STD-006C. 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.

Pot Maintenance

Kester's Solder Analysis Program (Option C) should be utilized periodically to verify composition and purity. If the Copper level in the pot exceeds 0.85%, the alloy may behave more sluggishly and create hole-fill defects. Should you need to reduce the Copper level in the pot, Kester SAC300 (Sn97Ag3) should be added to balance the pot.

Storage & Shelf Life

Kester Ultrapure® SAC305 solder 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.