

KappCu™

Description

KappCu[™] Tin-Copper NSF compliant solder replaces KappLead[™] (Tin-Lead) solders in plumbing and Stainless Steel soldering applications. It is a low cost alternative to higher priced Silver solders and offers a wider workable range than KappAnt[™] solders, allowing for joint build-up and adjustment during cooling.



This product complies with NSF/ANSI Standard 372: Drinking Water System Components – Lead Content. Product also Certified to NSF/ANSI 61, Annex G and conforms with Lead content requirements for "Lead-free" plumbing as defined by California, Vermont, Maryland, and Louisiana state laws and the U.S. Safe Drinking Water Act in effect as of January 4, 2014. Weighted average lead content < 0.25%; Solder and flux lead content < 0.20%. This alloy complies with the European RoHS and REACH directives. No lead, cadmium or mercury used in production.

Applications

- Plumbing applications when joining Copper, Brass, or Stainless Steel
- Situations where higher temperatures can be attained without harm to adjacent parts
- Used extensively for large Stainless Steel products in the food service industry as well as potable water applications
- Paired with Kapp CopperBond™ Flux

Properties

Composition	
Sn (Tin):	97%
Cu (Copper):	3%
Properties	
Properties:	Lead-Free, Cadmium-Free
Melting Range:	441-635°F (227-335°C)
Shear Strength of Soldered Joints (Strength, N/mm ² at 1mm per minute):	Room Temp. = 24.3; 212°F (100°C) = 2.4 N/mm ²
Stress to Rupture of Soldered Joints (Stress to Cause Failure in 1000 hours, N/mm):	Room Temp. = 8.8; 212°F (100°C) = 2.4 N/mm ²
Fatigue Strength of Soldered Joints (Maximum Stress to cause failure in 1000 cycles):	Room Temp. = 14.5; 212°F (100°C) = 7.9
Area of Spread Test Results (On a fluxed Copper substrate using 200mg solder pellet):	Temperature = $689^{\circ}F$ ($365^{\circ}C$); Area of Spread cm ² = 0.7

Product Variants

*Available in standard forms: 1/32" (0.031") (0.8mm), 1/16" (0.063") (1.6mm), 1/8" (0.125") (3.2mm). Custom alloys and forms are our specialty. Call a Kapp representative to discuss what size and diameter are right for you.

Matching Flux

• Kapp CopperBond[™] Flux