

PO Box 1188, 1 Klein Street, Oil City, PA 16301-0688 Telephone: 800-327-6533 Fax: 814-676-5565

Website: www.kappalloy.com, email: jack@kappalloy.com

KappTec™

Description

KappTec[™] Cadmium-Silver solder is a high temperature, high strength, general purpose solder for all solderable metals except Aluminum. It is highly recommended for Stainless Steel to Stainless Steel and Stainless Steel to Copper soldering. This alloy is outstanding in high vibration and high stress situations. Its high electrical conductivity versus other solders makes it an excellent choice for electrical applications. **KappTec[™]** is used in applications where alloys melting higher than soft solders are required, but the cost and strength of Silver brazing alloys is not necessary. Above its solidus of 640°F (338°C), this solder is extremely fluid and will penetrate the closest joints. **KappTec[™]** is used extensively in light bulbs, light fixtures, and other high vibration, high stress electronic applications.

Applications

- Highly recommended for Stainless Steel and Copper soldering
- Outstanding in high vibration and high stress applications
- High electrical conductivity versus other solders makes it an excellent choice for electrical applications
- Particularly helpful with large parts that require more heat
- Performance in application is similar to the more expensive Silver brazing alloys
- This alloy is NOT recommended for food or potable water applications. Please see KappFree™ and/or KappZapp™ for NSF compliant Food Safe and Potable Water Application.

Best Use & Features

- Greater bond strength and consistency are accomplished by pre-tinning the parts with KappTec[™] before
 jigging into final positions
- Pre-tinning helps avoid overheating the flux in the final joining process, resulting in better flow and a stronger joint
- The joints have good corrosion resistance, high electrical properties, high shear, and high tensile strengths
- Paired with Kapp CopperBond™ Flux

Properties

Composition	
Cd (Cadmium):	95%
Ag (Silver):	5%
Technical Data	
Melting Range:	640-740°F (338-393°C)
Density:	4.65lbs./cu. in.
Electrical Conductivity:	22 (% IACS)
Electrical Resistivity:	7.9%
Shear Strength (Copper):	11,000 psi @ 72°F (22°C)
Shear Strength (1020 Steel):	12,000 psi @ 72°F (22°C)
Tensile Strength:	Up to 25,000 psi
Specific Gravity:	8.82

^{*}Shear strength based on double lap joints

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 Kapp to discuss what size and diameter are right for you.