

KappCad™

Description

KappCad[™] Cadmium-Zinc solders are medium temperature alloys that provide strong, corrosion-resistant joints on most metals, making them an excellent choice for soldering dissimilar metals. These solders are often used in applications requiring higher temperatures and superior strength joints, especially Aluminum to Aluminum and Aluminum to Copper joints in electronics, lighting, and electrical products.

NOTE: Cadmium is a health hazard and should not be used in potable water or food processing equipment. See <u>SDS</u> for detailed precautions and protective measures.

Applications

- Joining Aluminum to Aluminum and Aluminum to Copper
- Joining dissimilar metals
- Joints requiring higher temperatures and superior strength
- In electronics, lighting, and electrical products that require excellent corrosion resistance and superior strength in high vibration and high stress applications
- Paired with <u>Kapp Golden™ Flux</u> for soldering below 550°F (288°C) and <u>Kapp Lunar™ Flux</u> for soldering above 550°F (288°C)

Properties

The following chart represents Kapp Alloy's standard **KappCad™** alloys. Many factors, such as materials, temperature, and method of application determine the solder joint strength and characteristics. Call Kapp for engineering assistance to discuss your specific needs. We recommend testing appropriate alloys in your specific application to ensure suitability. Samples of Kapp alloys are always available upon request.

Technical Data			
Composition (%):	83Cd - 17Zn	70Cd - 30Zn	60Cd - 40Zn
Melting Range:	Eutectic @ 509°F (265°C)	509-572°F (265-300°C)	509-600°F (265-316°C)
Tensile Strength (Copper):	24,000 psi	27,000 psi	30,000 psi
Shear Strength:	11,000 psi	12,000 psi	13,000 psi
Elongation:	2%	2%	2%
Electrical Conductivity (%IACS):	25.7%	26%	26.8%

Product Variants

*Available in standard forms: 1/32" (0.031") (0.8mm), 1/16" (0.1") (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 Golden[™] Flux for soldering below 550°F (288°C), and
- Kapp Lunar[™] Flux for soldering above 550°F (288°C)