



KappTec_™ High Temperature Solders

Kapp Tec_™ is a high temperature, high-strength solder. It is used in applications where alloys melting higher than soft solders are required, but the strength of expensive silver-brazing alloys is not necessary. This alloy is exceptional in high-vibration and high-stress situations. Its high electrical conductivity in relationship to other solders makes it an excellent choice for electrical applications. Kapp Tec is used extensively in light bulbs, light fixtures, and other high vibration, high stress electronic applications. Above its liquidus of 740°F, this solder is extremely fluid and will penetrate the closest joints. It is used with a flux appropriate for the base metal, and its performance in application is similar to the more expensive silver brazing alloys. The joints have good corrosion resistance, high electrical properties, and high shear and tensile strengths.

ALLOY: 95Cd/5Ag **CHEMICAL COMPOSITION:** 95% Cadmium, 5% Silver

USES: This is a general purpose solder that will join all solderable metals except aluminum. It is highly recommended for stainless steels and copper soldering.

RECOMMENDED FLUX: Kapp Copper-Bond_™ Flux

<u>Property</u>	PHYSICAL PROPERTIES	
	<u>Kapp Tec</u>	<u>Kapp TecZ</u>
Melting Range:	640 - 740°F/338 - 393°C	480 - 600°F/249 - 316°C
Specific Gravity:	8.82	8.55
Density:	4.65	
Electrical Conductivity:	22 (%IACS)	20.6 (%IACS)
Electrical Resistivity:	7.9 (Microhm-cm)	8.4 (Microhm-cm)
Shear Strength:(on 1020 steel)*	12,000 psi @ 72 °F	13,000 psi @ 72 °F
Shear Strength:(on copper)*	11,000 psi @ 72 °F	12,000 psi @ 72 °F
Tensile Strength:	Both up to 25,000 psi depending on base metals, soldering methods, and type of joint.	

*SHEAR STRENGTHS BASED ON DOUBLE LAP JOINTS

Kapp TecZ_™ is a high temperature, high strength solder that may be used on most metals, but works extremely well on aluminum, copper and stainless steel. It has a high tolerance to vibration and stress, and good elongation for use on dissimilar metals. Above its liquidus of 600°F, this solder is extremely fluid and will penetrate the closest joints. It is used with a flux appropriate for the base metal, and its performance in application is similar to the more expensive silver brazing alloys. The joints have good corrosion resistance, high electrical properties, and high shear and tensile strengths.

ALLOY: 78Cd/17Zn/5Ag **COMPOSITION:** 78% Cadmium, 17% Zinc, 5% Silver

USES: This general purpose silver alloy solder is used for ferrous and non-ferrous joining where high strength is required at a comparatively low temperature. **TecZ_™** will solder all solderable metals including aluminum, as well as aluminum to copper.

RECOMMENDED FLUX: Kapp Copper-Bond_™ Flux for metals except aluminum
Kapp Lunar_™ Flux for soldering to aluminum