



Kapp Galvanite™

Description

Galvanite™ Tin-Zinc-Copper solder is a new Lead-free formulation designed specifically for high quality repairs to Galvanized Steel surfaces. This solder is simple, effective, and easy to use in both manufacturing and field applications. Just like the original Galvanized metal, **Galvanite™** metallurgically bonds to the Steel, for a seamless protective barrier that outlasts Zinc-rich paints and sprays. **Galvanite™** exceeds performance standards as specified by ASTM standard A780 for repair of Galvanized parts.

Benefits & Features

Galvanite™ has been designed to accomplish three important Lead-free objectives:

1. Provide excellent cathodic and barrier protection, far superior to Zinc paints and alternative Lead solders in abrasion resistance, adhesion, and hardness
2. Allow easy application at low temperatures with any heat source
3. Produce a Lead-free composition to address environmental and health concerns

Applications

- Restore a Galvanized Coating on a Galvanized Steel part repaired by cutting and/or welding
- Provides an extremely strong and corrosion resistant coating to protect the weld joint. These joints support most Steel buildings and bridges for decades without further maintenance
- Can be applied to a substantial thickness in almost any orientation, penetrating deep into cracks and imperfections to provide a seamless protective barrier
- High Zinc content provides excellent cathodic protection and the repair blends and bonds with the original Galvanized metal coating
- Paired with Kapp CopperBond™ Flux. (Note: most applications do not require flux for a strong bond.)
- **NOT recommended for joining parts together**

Properties

Technical Data	
Melting Range:	390-570°F (200-300°C)
Tensile Strength:	39,000 psi
Compression Strength:	60,000-75,000 psi
Shear Strength:	34,000 psi
Impact Strength (Charpy):	4 ft.lbs. to break 1/4" bar
Hardness (Brinell-500 kg. load):	100
Ductility:	Good
Density:	.25lbs./cu. in.
Elongation:	3% in 2 inches
Linear Expansion Coefficient:	$15.4 \times 10^{-6} / ^\circ\text{F}$
Electrical Conductivity:	24.9 (%IACS)
Thermal Conductivity:	.24 cal / cm ³ / °C
Corrosion Penetration:	300×10^{-6} in 1 1 / R
Foxity:	None (under 1500°F)
ASTM Specifications:	Exceeds A780

Composition	
Tin (Sn):	50%
Zinc (Zn):	49%
Copper (Cu):	1%

*Available in standard forms: .200" x .300" x 14" sticks.

Matching Kapp CopperBond™ Flux

Kapp CopperBond™ Flux works with Galvanite™ to remove the oxide layer on Steel and Galvanized surfaces, allowing a strong metallic bond to form between the solder and the base metal. It has an active range of 500-750°F (260-390°C). Note that most Galvanized coating repairs do not require flux to form a strong bond.