



**SN100^e
LEAD FREE
SOLDER BAR**

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Description

Qualitek® lead free solder bar Sn100° is manufactured from tin, copper and cobalt and processed to create a solder that exceeds most purity specification requirements. Lead free solder alloy, Sn99.5/Cu0.5/Co is used primarily in printed circuit board assembly and is RoHS compliant. Sn100° is specifically designed for use in all wave soldering, tinning and dip applications. This alloy provides brighter, shinier joints (less grainy) when compared to SAC305 alloy.

Physical Properties

Solder Composition

Qualitek Sn100° (Sn99.5/Cu0.5/Co) is designed as a lead-free alternative for Sn/Pb alloys for electronics assembly operations. Qualitek Sn100° alloy conforms and exceeds the impurity requirements of IPC-J-STD-006C and all other relevant international standards.

| Typical Analysis | | | | | | | | | | | | | | |
|------------------|--------------|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Sn | Ag | Cu | Pb | Sb | Bi | In | As | Fe | Ni | Cd | Al | Zn | Au | Co |
| Bal | 0.100 Max | 0.3- 0.7 | 0.070 Max | 0.200 Max | 0.100 Max | 0.100 Max | 0.030 Max | 0.020 Max | 0.010 Max | 0.002 Max | 0.005 Max | 0.003 Max | 0.050 Max | 0.07 Max |

| | Sn100e |
|--|-----------------------|
| Melting Point, °C | 228 E |
| Hardness, Brinell | 9 HB |
| Coefficient of Thermal Expansion | 22 x 10 ⁻⁶ |
| Tensile Strength, MPa | 28 |
| Yield Strength, MPa | 21 |
| Density, g/cc | 7.40 |
| Electrical Resistivity, (μohm-cm) at 25 °C | 0.123 |
| Thermal Conductivity, (W/m.K) at 25 °C | 82 |

Storage and Shelf Life

Qualitek Sn100° solder bar storage should be in a cool, dry environment away from direct heat. We recommend using gloves when handling solder bar directly. Solder bar has an indefinite shelf life.

Packaging

Sn100° solder bar is available in

Box of 20 2. lb. bars

Disposal

Sn100° solder bar should be disposed of in accordance with federal, state and local authority requirements.

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