



**QUALITEK**



Ecolloy™  
LEAD FREE  
SOLDER BAR

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**Description**

Qualitek® has developed a new patented lead free alloy, Ecolloy™ that performs better than SAC305 in the drop test. Ecolloy has a melting point range in between SAC305 and Sn/Cu alloys for better performance during reflow. Ecolloy alloy is available in solder bar, paste and wire forms.

**Physical Properties**

**Solder Composition**

Ecolloy™ conforms and exceeds the impurity requirements of IPC-J-STD-006C and all other relevant international standards.

<b>Typical Analysis</b>														
	Sn	Ag	Cu	Pb	Sb	Bi	In	As	Fe	Ni	Cd	Al	Zn	Au
<b>Ecolloy™</b>	Bal	0.100 Max	0..1-1	0.070 Max	0.200 Max	<6.0	0.100 Max	0.030 Max	0.020 Max	0-0.1	0.002 Max	0.005 Max	0.003 Max	0.050 Max

	<b>Ecolloy™</b>	<b>SAC305</b>
Melting Point, °C	221 - 227	217 - 221
Hardness, Brinell, HV	23	14.1
Coefficient of Thermal Expansion, ppm/ °C	23	23
Tensile Strength, MPa	63	49
Density, g/cc	7.4	7.4
Electrical Resistivity (μohm-cm)	12	12
Electrical Conductivity, %IACS	14.3	14.3
Elongation, %	50	63
Specific Heat, J/g.K	0.23	0.23

**Handling & Storage**

Solder bar storage should be in a 65-80 °F environment away from direct heat. We recommend using gloves when directly handling solder bar. Solder bar has an indefinite shelf life.

**Packaging**

Ecolloy™ solder bar is available in

- Box of 20-2.2 Lb. bar (1 kg) Kilobar
- Box of 5-11 Lb. bars (5 kg) Equalizer

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