



# QUALITEK®

## DELTA® 670 Solder Paste No-Clean

### DESCRIPTION

670 No-clean solder paste is designed for surface mount and other electronic assembly applications. After reflow, a non-corrosive, non-conductive, highly insulated, transparent residue remains.

### BENEFITS

- **Bellcore compliant**
- **No cleaning required**
- **Non-corrosive**

### APPLICATION

#### PRINTING / PARTICLE SIZE

- ≥ 50 mil pitch: Use -200 +325 mesh
- ≥ 16 mil pitch: Use -325 +500 mesh
- ≤ 16 mil pitch: Use -400 +635 mesh

#### ALLOYS

Sn63/Pb37, Sn62/Pb36/Ag2, Sn42/Bi 58, Sn48/In52, etc,  
(Meets J-STD-006 Specification)

#### METAL CONTENT

Stencil Printing: 90%  
Screen Printing: 88%

### REFLOW PROFILE

The melting temperature of the solder and the heat resistance of components determine reflow Profile. 670 can be processed in most reflow media, (i.e. IR, Vapor-phase, Forced convection, etc.). Ramp rate of 2.5-3.0°C per second is desirable, since most components are rated for 4.0°C per second.

### PHYSICAL / CHEMICAL CHARACTERISTICS

<b>Color and Appearance</b>	Metallic Gray
<b>Water Extract Resistivity (Flux Extract)</b>	>100,00 ohm/cm
<b>Copper Mirror Test</b>	Pass
<b>Silver Chromate (Chloride &amp; Bromide Test)</b>	Pass
<b>Surface Insulation Resistance-Ohms</b>	
J-STD-004	>1.0 x 10 <sup>10</sup>
<b>Electromigration<sup>3</sup></b>	Pass
<b>pH-5% Aqueous Solution (Flux Extract)</b>	4.2 - 4.7
<b>Softening Point</b>	94°C
<b>Viscosity</b>	
Malcom <sup>1</sup>	175 - 205 kcps, 90% metal, (-325+500 mesh)
Brookfield <sup>2</sup>	1,000 kcps +/- 10%, 90% metal, (-325+500 mesh)
<b>Tack</b>	
Time	4 - 8 Hours

### SHIPPING & STORAGE

Recommended Storage Temperature 35°-50°F

### SHELF LIFE

Unopened Container	35°-65°F	6 Months (from DOM)
	77°F	1 Months (from DOS)

1. Malcom PCU-Series, 10 RPM, 25°C
2. Brookfield RVT, TF spindle, 5 RPM, 25°C, 0.75" spindle depth
3. Bellcore GR-78-CORE

Delta® is a registered trademark of Qualitek International, Inc.

TEL: +44 (0) 151 334 0888 FAX: +44 (0) 151 346 1408 E-mail: [qualitek@globalnet.co.uk](mailto:qualitek@globalnet.co.uk) Internet: [www.qualitek.com](http://www.qualitek.com)  
9 Apex Court, Bassendale Road, Wirral International Business Park, Bromborough, Wirral, CH62 3RE



WORLDWIDE BRANCHES: UNITED KINGDOM – MEXICO – CHINA – PHILIPPINES – SINGAPORE-USA

This data is based on information that the manufacturer believed to be reliable and offered in good faith. Qualitek International, Inc. makes no warranties expressed or implied as to its accuracy and assumes no responsibilities and liabilities arising out of its use by others as conditions and methods of use of the products is beyond the control of Qualitek International, Inc. The user must determine the suitability of the product before using it on a commercial basis. The warranties extend only to the conformity of the product to the physical descriptions. In no event will Qualitek International, Inc. be responsible for special, incidental and consequential damages whether the claim is in contract, negligence or otherwise.

Rev. 082099-670

Consult MSDS for health and safety information