



# QUALITEK®

## Delta Elite™

### 670I Solder Paste, No-Clean

#### DESCRIPTION

670I No-clean solder paste is designed for surface mount and other electronic assembly applications. 670I is a high tack formula for use in high speed component placement systems. After reflow, a non-corrosive, non-conductive, highly insulated, transparent residue remains.

#### BENEFITS

- Bellcore compliant
- High tack force
- 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, 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. 670I 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

Color and Appearance	Metallic Gray
Copper Mirror Test	Pass
Silver Chromate Chloride & Bromide Test)	Pass
Surface Insulation Resistance-Ohms	
J-STD-004	>1.0 x 10 <sup>10</sup>
Electromigration <sup>3</sup>	Pass
pH-5% Aqueous Solution (Flux Extract)	5.0 – 6.0
Softening Point	94°C
Viscosity	
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)
Tack <sup>4</sup>	
Time	4 - 8 hours
Initial tack force	38.8 grams (1.17g/mm <sup>2</sup> )
Tack retention after 8 hours	57.6 grams (1.74g/mm <sup>2</sup> )

#### SHIPPING & STORAGE

Recommended Storage Temperature	35°-50°F
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#### 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 RVTD, TF spindle, 5 RPM, 25°C, 0.75" spindle depth
3. Bellcore GR-78-CORE
4. Per IPC-TM-650 2.4.44

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Consult MSDS for health and safety information

# 670I PROFILE

