



# QUALITEK®

## DeltaElite™

### 818N Solder Paste, Low Residue, No-Clean

#### Description

818N No-Clean is a low residue solder paste designed for surface mount and other electronic assembly applications. The unique properties of this formula provide excellent activity, low voiding, long stencil life, long tack time, high print speed and a longer shelf life. Post Soldering residues are non-corrosive and non-conductive.

#### BENEFITS

- Bellcore compliant
- 24 hour stencil life
- Excellent abandon time
- Excellent wetting on OSP
- Low Voiding
- Prints up to 150mm per sec.
- Low clear safe residue
- Air or nitrogen Reflow

#### 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. 818N 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>Copper Mirror Test</b>	Pass/No Breakthrough
<b>Silver Chromate (Chloride &amp; Bromide Test)</b>	Pass/ No discoloration
<b>Surface Insulation Resistance-Ohms</b>	
<b>Classification</b> ROL0	
<b>J-STD-004</b> 1.58 x 10 <sup>11</sup> ohms (7 days, 85C, 85%R.H.)	
<b>Bellcore</b> 2.61X 10 <sup>11</sup> ohms (7 days, 85C, 85%RH.)	

<b>Electromigration Bellcore</b>	Pass
<b>pH-5% Aqueous Solution (Flux Extract)</b>	3.0 – 5.0
<b>Softening Point</b>	125°C

<b>Viscosity</b>	
<b>Malcom</b> <sup>1</sup>	170 - 200 kcps, 90% metal, (-325+500 mesh)
<b>Brookfield</b> <sup>2</sup>	900 kcps +/- 10%, 90% metal, (-325+500 mesh)
<b>Tack Time</b>	48 Hours (22C, 45% RH.)

#### SHIPPING & STORAGE

<b>Recommended Storage Temperature</b>	35°-50°F
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#### SHELF LIFE

<b>Unopened Container</b>	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

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# 818N PROFILE

