

# **QUALITEK®**

# Delta**÷**Elite<sup>™</sup>

## **Water-Soluble Solder Paste**

#### **DESCRIPTION**

775-2 is a halogen free, slump resistant, water-soluble solder paste designed for surface mount and other electronic assembly applications. 775-2 utilizes a low volatility solvent system, resulting in a tack time over 12 hours. Post soldering residue can be easily removed with warm DI water cleaning systems.

#### **BENEFITS**

Halogen free

Non-hyrgroscopic

High tack force

• High slump resistance

Flux residues easily removed with warm DI water

Pleasant odor

Extended stencil life

# **APPLICATION**

#### STENCIL PRINTING/PARTICLE SIZE

 $\geq$  50 mil pitch: Use -200+325 mesh  $\geq$  16 mil pitch: Use -325+500 mesh  $\leq$  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. 775-2 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
Slump Test Pass
Copper Mirror Test Pass/No breakthrough
Surface Insulation Resistance(cleaned)-Ohms

J-STD-004 >1.0 x 10<sup>11</sup> **pH-5% Aqueous Solution (Flux Extract)** 7.0 - 8.0

Viscosity

Malcom<sup>1</sup> 210-250 kcps, 90% metal, (-325+500 mesh) Brookfield<sup>2</sup> 1000 kcps +/- 10%, 90% metal, (-325+500 mesh)

Tack<sup>3</sup>

Time >12 hours
Initial tack force 38.6 grams (1.16g/mm²)
Tack retention after 24 hours 23.2 grams (.70g/mm²)

## **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 RVTD, TF spindle, 5 RPM, 25°C,0.75" spindle depth

3. Per IPC-TM-650 2.4.44

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Consult MSDS for health and safety information

# **775-2 PROFILE**

