



# QUALITEK®

## 390 Flux No-Clean Rosin

### DESCRIPTION

390 is a no-clean rosin flux with a relatively benign insulating residue that is non-hygroscopic.

### BENEFITS

- Very bright, shiny solder joints
- Non-hygroscopic
- Excellent wetting on most substrates

### APPLICATION METHODS

390 no-clean flux may be applied by foam, spray, or wave methods. Flux deposition, density, and uniformity are critical to successful use of low solids no-clean flux. After foam or wave application, an air knife should be used to remove excess flux from the assembly. Pre-heating the assembly will partially volatilize the solvents, enhance oxide removal, and promote optimum wicking and solder joint formation. The optimum pre-heat temperature range is 90<sup>o</sup>-110<sup>o</sup>C (194<sup>o</sup>-230<sup>o</sup>F) on the top side of the assembly.

### PACKAGING & STORAGE

390 flux is available in 1, 5 and 55 gallon containers. It should be stored in cool, dry place away from ignition sources.

### PHYSICAL & CHEMICAL CHARACTERISTICS

<b>Color and Appearance</b>	Amber Liquid
<b>Solids Content, % (By Wt.)</b>	14.0 – 18.0
<b>Specific Gravity</b>	0.840 +/- 0.006
<b>Flash Point</b>	53°F
<b>Surface Insulation Resistance-Ohms</b>	
J-STD-004	>1.00 x 10 <sup>9</sup>
<b>Electromigration</b>	Pass
<b>Acid Number</b>	42.0 – 46.0
<b>Flux Classification per J-STD-004</b>	ROM1
<b>Halide %</b>	.16
<b>Shelf life (un-opened)</b>	2 years

### PROCESS CONTROL

Control of the flux is necessary to ensure a consistent amount of flux is applied to assemblies. Due to the very low solids percentage of no-clean fluxes, specific gravity is not an accurate measure for solids content. Monitoring and controlling acid number is recommended to maintain the proper flux concentration. Titration may be accomplished with the Qualitek HDT-200 Digital Titration Kit. Control of the flux can be achieved with Qualitek 300A thinner. Debris and contaminants will accumulate in the flux reservoir. Periodically, the replacement of the flux is required for consistent soldering performance, and to prevent debris build-up on the circuit assemblies. This should be performed every 35-40 hours of operation.

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Consult MSDS for health and safety information