



QUALITEK®

360F Flux Low Solids, No-Clean

DESCRIPTION

360F no-clean is a homogeneous mixture of halogen-free, low solids flux developed to meet the industry's need for high speed automation and high reliability. 360F exhibits excellent wetting and fluxing characteristics with essentially no post-soldering residue. 360F eliminates the expense of cleaning without surface insulation resistance degradation. The unique solvent system used in 360F allows for a very broad process window.

BENEFITS

- Halide Free
- Excellent wetting on virtually all types of substrates
- Bright, shiny solder joints
- Drops in to most operations without process changes
- Rosin/Resin free

APPLICATION METHODS

360F 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^o-110^oC (194^o-230^oF) on the top side of the assembly.

PACKAGING & STORAGE

360F 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

| | |
|-------------------------------------------|---------------------------------|
| Color and Appearance | Colorless Liquid |
| Solids Content, % (By Wt.) | 2.3 – 2.7 |
| Specific Gravity | 0.818 +/- 0.006 |
| Flash Point | 58°F |
| Surface Insulation Resistance-Ohms | |
| J-STD-004 | >1.00 x 10 ⁹ |
| Acid Number | 14.0 – 18.0 |
| Flux Classification per J-STD-004 | ORL0 |
| Copper Mirror Test | Pass (No complete breakthrough) |
| Silver Chromate Test | |
| Chloride and Bromide | Pass (No discoloration) |
| Spot Test (Flouride) | Pass (No color change) |
| Corrosion Test | Pass (No evidence of corrosion) |
| Shelf life (un-opened) | 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 300B 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 assembly. This should be performed every 35-40 hours of operation.

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TEL: (630) 628-8083 FAX: (630) 628-6543 E-MAIL: solder@qualitek.com HOME PAGE: <http://www.qualitek.com>

HEADQUARTERS: 315 Fairbank St., Addison, IL 60101 U.S.A.

WORLDWIDE BRANCHES: UNITED KINGDOM – MEXICO – CHINA – PHILLIPINES - SINGAPORE

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Consult MSDS for health and safety information