kester®
Technical Data Sheet

RF550 Rework Flux

High-Reliability, Zero-Halogen, No-Clean

Product Description

Kester RF550 is a high-reliability, zero-halogen, no-clean rework flux designed for electronic component rework and repair applications. RF550 has a gel-like consistency and is packaged in syringes for easy dispensing. RF550 can be precisely dispensed onto specific areas that require flux. After being dispensed, RF550 stays in place until soldering occurs. RF550 has excellent performance in applications requiring high reliability. RF550 is the ideal choice for QFP or BGA semi-automated rework applications, and is well suited for use with through-hole repair. RF550 compliments Kester's high reliability line of products which are formulated to leave safe residues. RF550 can be used in combinations with Kester no-clean flux-cored solder wires, no-clean solder pastes and no-clean liquid fluxes without any compatibility risks. For a list of compatible products, visit Kester' website or contact Kester Technical Support.

Performance Characteristics:

- Zero-halogen (none intentionally added)
- Classified as ROL0 per J-STD-004B

RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2015/863 for the stated banned substances.

Physical Properties

Viscosity (typical): 310 poise
Malcom Viscometer @ 10 rpm and 25°C

Acid Number (typical): 162 mg KOH/g of flux
Tested to J-STD-004, IPC-TM-650, Method 2.3.13

Reliability Properties

Copper Mirror Corrosion: Low
Tested to J-STD-004B, IPC-TM-650, Method 2.3.32D

Corrosion Test: Low
Tested to J-STD-004B, IPC-TM-650, Method 2.6.15

Halogen Content: None Detected
Tested to J-STD-004B, IPC-TM-650, Method 2.3.2.81

Electrochemical Migration (ECM): Pass
Tested to J-STD-004B, IPC-TM-650, Method 2.6.14.1
Test Conditions: 65+/-2°C; 85+3/-0 % RH

Bono Corrosion Test: Pass; Fc=1.1%
Test Conditions: 85°C, 85% RH, 15 days, 12V

Bellcore SIR, IPC: Pass
All Readings $>2.0x10^{10}$ Ω
Tested to GR78 Core 13.1.3;
Test Conditions: 35°C, 85% RH, 4 days, 100V

Surface Insulation Resistivity (SIR): Pass
Tested to J-STD-004B, IPC-TM-650, Method 2.6.3.7
Test Conditions: 40°C, 90% RH, 7 days, 12.5V

Surface Insulation Resistivity (SIR): Pass
Tested to J-STD-004A, IPC-TM-650, Method 2.6.3.3
Test Conditions: 85°C, 85% RH, 7 days, 100V

Cleaning

RF550 is a no-clean formula. The residues do not need to be removed for typical applications. Although RF550 is designed for no-clean applications, its residues can be easily removed using automated cleaning equipment (in-line or batch) with a variety of readily available cleaning agents. If residue removal is required, call Kester Technical Support.

Storage, Handling and Shelf Life

Shelf life is 1 year from the date of manufacture when stored between 0-10°C (32-50°F).

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet and warning label before using this product.