

RF741

No-Clean Electronic-Grade Rework Flux

Product Description

Kester RF741 is a high-viscosity, no-clean flux designed for electronic component rework and repair applications. Kester RF741 has a gel-like consistency and is easily applied by syringe dispensing. Kester RF741 can be precisely dispensed onto a specific area that needs flux. After being dispensed, Kester RF741 stays in place until soldering occurs. Traditional problems experienced with controlling the application of low solids no-clean liquid fluxes are eliminated. Kester RF741 has excellent performance in applications requiring a flux having good thermal stability such as surface mount component repair. Kester RF741 is the ideal choice for QFP or BGA semi-automated rework operations. In addition, RF741 is well suited for use with through-hole repair operations where solder fountain or controlled solder reservoir is being used for selective component removal and repair. Residues that remain on surfaces after soldering are almost colorless, leaving a very cosmetically appealing repair. The residue has high electrical resistance and can be left on the assembly after soldering. Residues are compatible with all no-clean fluxes in the Kester product line. Kester RF741 can be used in combinations with Kester no-clean cored wire solders and no-clean solder pastes, as well as no-clean liquid fluxes without any compatibility risks.

Performance Characteristics:

- Compatible with most no-clean chemistries
- Leaves bright/shiny solder joints after reflow
- Classified as ROL0 per J-STD-004
- Compliant to Bellcore GR-78

Physical Properties

Viscosity (typical): 180 poise

Malcom Viscometer @ 10rpm and 25°C

Acid Number: 75.0 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-004, IPC-TM-650, Method 2.3.32

Corrosion Test: Low

Tested to J-STD-004, IPC-TM-650, Method 2.6.15

Silver Chromate: Pass

Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Chloride and Bromides: None Detected

Tested to J-STD-004, IPC-TM-650, Method 2.3.35

Fluorides by Spot Test: Pass

Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1

SIR, IPC (typical): Pass

Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3

| | Blank | RF741 |
|-------|-----------------------------|--------------------------|
| Day 1 | $2.5 \times 10^{10} \Omega$ | $4.0 \times 10^8 \Omega$ |
| Day 4 | $1.5 \times 10^{10} \Omega$ | $1.6 \times 10^9 \Omega$ |
| Day 7 | $1.4 \times 10^{10} \Omega$ | $4.0 \times 10^9 \Omega$ |

RoHS Compliance

This product meets the requirements of the RoHS (Restriction of Hazardous Substances) Directive, 2002/95/EC Article 4 for the stated banned substances.

Application Notes

Cleaning:

Kester RF741 is a no-clean chemistry. The residues do not need to be removed for typical applications. If residue removal is required, call Kester Technical Support.

Storage, Handling, and Shelf Life:

RF741 should be kept at 15-32°C (60-90°F). Shelf life is 6 months from date of manufacture when handled properly and held at 15-32°C (60-90°F).

Health & Safety:

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

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