

RF742

No-Clean Electronic-Grade Rework Flux

Product Description

Kester RF742 is a high-viscosity, no-clean flux designed for electronic component rework and repair applications. Kester RF742 has a gel-like consistency and is easily applied by syringe dispensing. Kester RF742 can be precisely dispensed onto a specific area that needs flux in hand soldering operations. After being dispensed, Kester RF742 stays in place until soldering occurs. Kester RF742 was designed as the ideal companion flux for hand soldering a PCB that already includes the residues from Kester FL250D solderpaste. Traditional problems experienced with controlling the application of low solids no-clean liquid fluxes are eliminated with the use of Kester RF742. Residues that remain on surfaces after soldering are almost colorless, leaving a cosmetically appealing post-soldering appearance. The residue has high electrical resistance and can be left on the assembly after soldering. However, the residues can also be easily removed using traditional saponification cleaners, semi-aqueous or hydrocarbon-based solvents. Residues are compatible with all no-clean fluxes in the Kester product line. RF742 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 FL250D Solderpaste
- Leaves bright/shiny solder joints after reflow
- Classified as ROL0 per J-STD-004
- Compliant to Bellcore GR-78

Physical Properties

Viscosity (typical): 484 poise

Malcom Viscometer @ 10rpm and 25°C

Acid Number: 80.0 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

| | <u>Blank</u> | <u>RF742</u> |
|-------|--------------------------|-----------------------------|
| Day 1 | $7.3 \times 10^9 \Omega$ | $1.1 \times 10^{10} \Omega$ |
| Day 4 | $4.4 \times 10^9 \Omega$ | $8.2 \times 10^9 \Omega$ |
| Day 7 | $3.9 \times 10^9 \Omega$ | $5.7 \times 10^9 \Omega$ |

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 RF742 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:

RF742 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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