

# RF771

## Water-Soluble Electronic-Grade Rework Flux

### Product Description

Kester RF771 is a medium-viscosity, water-soluble flux designed for electronic component rework and repair applications. Kester RF771 has a gel-like consistency and is easily applied by syringe dispensing. Kester RF771 can be precisely dispensed onto a specific area that needs flux. After being dispensed, Kester RF771 stays in place until soldering occurs. Traditional problems experienced with controlling the application of water-soluble liquid fluxes are eliminated. Kester RF771 has excellent performance in applications that require a flux having good thermal stability such as surface mount component repair. Kester RF771 is the ideal choice for QFP or BGA semi-automated rework operations. In addition, Kester RF771 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 easily removed with hot water. Kester RF771 can be used in combination with Kester water-soluble cored wire solders and water-soluble solder pastes, as well as water-soluble liquid fluxes, to provide the complete water-soluble soldering connection.

#### Performance Characteristics:

- Compatible with HM531 Solderpaste
- High thermal stability
- Leaves bright/shiny solder joints after reflow
- Classified as ORM0 per J-STD-004

### Physical Properties

**Viscosity (typical):** 285 poise

Malcom Viscometer @ 10rpm and 25°C

**Acid Number:** 42.0 mg KOH/g of flux

Tested to J-STD-004, IPC-TM-650, Method 2.3.13

### Reliability Properties

**Copper Mirror Corrosion:** High

Tested to J-STD-004, IPC-TM-650, Method 2.3.32

**Corrosion Test:** High

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

	<b>Blank</b>	<b>RF771</b>
Day 1	$1.7 \times 10^{10} \Omega$	$3.1 \times 10^8 \Omega$
Day 4	$1.0 \times 10^{10} \Omega$	$4.4 \times 10^8 \Omega$
Day 7	$9.2 \times 10^9 \Omega$	$9.2 \times 10^8 \Omega$

### 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 RF771 is a water-soluble flux and the residues must be removed. The recommended method of removing flux residues is in a batch washer or in-line cleaner, using de-ionized or soft water. The recommended washing temperature is 54-66°C (130-150°F).

### Storage, Handling, and Shelf Life:

Kester RF771 should be kept at 15-32°C (60-90°F). Shelf life is 1 year 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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