

KESTER® 951 FLUX-PEN®

Low-Solids, No-Clean Flux-Pen

DESCRIPTION

Kester 951 Flux-Pen is a halogen-free, non-rosin flux-pen that is specifically designed for rework of conventional and surface mount circuit board assemblies. The extremely low solids content (2.0%) and nature of the activator system results in practically no residue left on the assembly after soldering. There are no residues to interfere with electrical testing. 951 Flux-Pen exhibits improved soldering performance to minimize solder bridges (shorts) during rework operations. This flux is suitable for automotive, computer, telecommunications and other applications where reliability considerations are critical. The surface insulation resistance on soldered boards is higher than that provided by typical organic water soluble fluxes. 951 Flux-Pen contains a corrosion inhibitor such that no corrosion products are formed when bare copper surfaces are exposed to humid environments.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- Improves soldering performance
- Eliminates the need and expense of cleaning
- Non-corrosive tack-free residues
- Classified as ORL0 per J-STD-004

ROHS COMPLIANCE

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2011/65/EU for the stated banned substances.

TECHNICAL DATA

Category	Results	Procedure/Remarks
Physical Properties		
Specific Gravity	0.814	Anton Paar DMA @ 25 °C
Percent Solids (Theoretical)	2.0%	
Acid Number (Typical)	14.3 mg KOH/g flux	Tested by potentiometric titration

Category	Results		Procedure/Remarks
Reliability Properties			
Copper Mirror Corrosion	Low		J-STD-004, IPC-TM-650, Method 2.3.32
Corrosion Test	Low		J-STD-004, IPC-TM-650, Method 2.6.15
Silver Chromate	Pass		J-STD-004, IPC-TM-650, Method 2.3.33
Chloride and Bromides	None Detected		J-STD-004, IPC-TM-650, Method 2.3.35
Fluorides by Spot Test	Pass		J-STD-004, IPC-TM-650, Method 2.3.35.1
Surface Insulation Resistivity (SIR) (Typical)	Pass		J-STD-004, IPC-TM-650, Method 2.6.3.3
		Blank	951
	Day 1	$2.3 \times 10^{10} \Omega$	$9.4 \times 10^9 \Omega$
	Day 4	$1.3 \times 10^{10} \Omega$	$7.8 \times 10^9 \Omega$
	Day 7	$9.8 \times 10^9 \Omega$	$6.3 \times 10^9 \Omega$

FLUX APPLICATION

951 Flux-Pen is applied to circuit boards via Flux-Pen® for rework of printed wire assemblies.

PROCESSING GUIDELINES

Process Considerations

951 Flux-Pen should only be applied to areas that will be fully heated by the soldering iron or other reflow tool. Care should be taken to avoid flooding the assembly. The surface tension has been adjusted to help the flux form a thin film on the board surface allowing rapid solvent evaporation.

Cleaning

951 Flux-Pen flux residues are non-conductive, non-corrosive and do not require removal in most applications.

Storage, Handling and Shelf Life

951 Flux-Pen is flammable. Store away from sources of ignition. Shelf life is 1 year from the date of manufacture when handled properly and held at 10 to 25 °C (50 to 77 °F). The cap must be in place when not being used.

RECYCLING SERVICES

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area.



SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

CONTACT INFORMATION

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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