NF372-TB Flux-Pen®

Zero-Halogen, No-Clean Flux-Pen for High Reliability Applications

Product Description

Kester NF372-TB Flux-Pen is a zero-halogen, no-clean, low solids flux available as a Flux-Pen for rework of conventional and surface mount circuit board assemblies. NF372-TB flux passes IPC SIR testing in a raw or unheated state, ensuring NF372-TB Flux-Pens can be safely used in rework applications, specifically those with high reliability requirements. NF372-TB Flux-Pen residues are minimal, clear and non-tacky for improved cosmetics. NF372-TB Flux- Pen is classified as ROL0 flux under IPC J-STD-004B.

Performance Characteristics:

- Zero-halogen (none intentionally added)
- Provides good solderability under air atmosphere
- Classified as ROL0 per J-STD-004B
- Pass SIR in raw state (unheated boards dried at 25 °C/50%RH for 24 hours before test)
- Non-corrosive, non-conductive and non-tacky residues
- Compliant to GR-78-CORE (Telcordia/Bellcore)

RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive. Additional RoHS information is located at https://www.kester.com/downloads/environmental.

Physical Properties

Acid Number (typical): 16.6 mgKOH/gm

Specific Gravity @ 25 °C (typical): 0.793

Solids Content (Theoretical): 3.90%

Reliability Properties

Copper Mirror: Low

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

Copper Corrosion: 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 2.3.28.1

Electrochemical Migration (ECM): Pass
Tested to J-STD-004B, IPC-TM-650, Method 2.6.14.1
Test Conditions: 65 °C, 90% RH, 100V, 25 Days

Surface Insulation Resistance (SIR): Pass, [All Readings >$1.0x10^8$ Ω]
Tested to J-STD-004B, IPC-TM-650, Method 2.6.3.7
Test Conditions: 40 °C, 90% RH, 12.5V, 7 Days

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

Surface Insulation Resistance (SIR) Bellcore: Pass, [All Readings >$2.0x10^{10}$ Ω]
Tested to GR-78 13.1.3
Test Conditions: 35 °C, 85% RH, 100V, 4 Days

Bono Corrosion Test: Pass, [Fc = 0.5%]
Test Conditions: 85 °C, 85% RH, 12V, 15 Days

Flux Application

NF372-TB Flux-Pen is applied to circuit boards via Flux-Pen for rework of printed wire assemblies.

Process Considerations

For best soldering performance, NF372-TB 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. In cases of over application or incomplete heating, NF372-TB Flux-Pen has passed SIR testing and has not contributed to corrosion.

Cleaning

NF372-TB Flux-Pen residues are non-conductive, non-corrosive and do not require removal in most applications. If residue removal is required, it can be removed using commercially available flux residue cleaner. Contact Kester Technical Support for additional assistance.

Storage, Handling and Shelf Life

NF372-TB Flux-Pen is flammable. Store away from sources of ignition. Shelf life is 2 years 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.

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. Safety Data Sheets are available at https://www.kester.com/downloads/sds.

Contact Information

To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

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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