



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. Kester NF372-TB flux passes IPC SIR testing in a raw or unheated state, ensuring Kester NF372-TB Flux-Pen®s 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
- 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)
- Classified as ROL0 per J-STD-004B

RoHS Compliance

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

Physical Properties

Specific Gravity: 0.793
Anton Paar DMA @ 25°C

Acid Number (typical): 16.6 mg KOH/g flux
Endpoint pH=9.2

Percent Solids (theoretical): 3.90%

Reliability Properties

Copper Mirror Corrosion: Low
Tested to J-STD-004B, IPC-TM-650, Method 2.3.32

Corrosion Test: Low
Tested to J-STD-004B, IPC-TM-650, Method 2.6.15

Bono Corrosion Test: Pass;
Fc=0.5%
Test Conditions: 85°C, 85% RH, 15 days, 20V

Surface Insulation Resistivity (SIR):
Pass All Readings > 1.0x10⁸ Ω
Tested to J-STD-004B, IPC-TM-650, Method 2.6.3.7
Test Conditions: 40°C, 90% RH, 7 days, 12.5V

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

Bellcore SIR, IPC: Pass
All Readings > 2.0x10¹⁰ Ω
Tested to GR-78 13.1.3
Test Conditions: 35°C, 85% RH, 4 days, 100V

Halogen Content: None Detected
Tested to J-STD-004-B, 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, 25 days, 100V

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, call Kester Technical Support.

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 10-25°C (50-77°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.