

48

Activated Rosin Cored Wire

For Lead-bearing and Lead-free alloys

Product Description

Kester 48 Activated Rosin Flux for cored solder wire was developed for lead-free applications to enable soldering of most common metals. Kester 48 has performance characteristics far exceeding standard RA fluxes. Kester 48 builds on the performance of its predecessor Kester 44 with “instant-action” wetting to provide fast and reliable solder joints.

Performance Characteristics:

- Unparalleled wetting performance
- Excellent solderability and fast wetting to a variety of surface finishes
- Eliminates the need and expense of cleaning
- Low smoke and odor
- Low spattering
- Classified as ROM1 per J-STD-004

Kester 48 vs. Kester 44

- Kester 48 provides a higher level of activity than Kester 44, see Spread Test opposite.
- Kester 48 dramatically reduces splattering by 50+% over Kester 44.
- Kester 48 residues are transparent and nearly colorless compared to the traditional amber appearance of Kester 44.
- Kester 48 was designed for lead-free alloys.

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. (Applies only if this core flux is combined with a lead free alloy)

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: Fail

Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Chloride and Bromides: 1.05%

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

| | Blank | 48 |
|-------|-----------------------------|-----------------------------|
| Day 1 | $1.6 \times 10^{10} \Omega$ | $1.1 \times 10^{10} \Omega$ |
| Day 4 | $1.2 \times 10^{10} \Omega$ | $9.2 \times 10^9 \Omega$ |
| Day 7 | $1.1 \times 10^{10} \Omega$ | $8.6 \times 10^9 \Omega$ |

Spread Test (typical):

Tested to J-STD-004, IPC-TM-650, Method 2.4.46

| | Area of Spread mm ² (in ²) | |
|----------------------------|---|------------|
| Flux Core Solder | Sn96.5Ag3.0Cu0.5 | Sn63Pb37 |
| 285 Mildly Activated Rosin | 213 (0.33) | 335 (0.52) |
| 275 No-Clean | 219 (0.34) | 361 (0.56) |
| 44 Activated Rosin | 220 (0.34) | 342 (0.53) |
| 48 Activated Rosin | 245 (0.38) | 419 (0.65) |