



44 Flux-Cored Wire

Activated Rosin Cored Wire for Lead-Free and Lead Alloy

Product Description

Kester 44 Rosin Flux is an activated rosin formula for use in flux-cored solder wire. 44 has virtually dominated the field of activated rosin core solders for well over four decades. An outstanding performance feature of this flux is the “instant-action” wetting behavior. The high mobility and fast-spreading action of this flux results in more reliable production line soldering.

Performance Characteristics:

- High activity RA formulation
- Excellent solderability to a wide variety of metalizations
- Industry standard RA cored wire for decades
- Classified as ROM1 per J-STD-004

RoHS Compliance

Kester does not determine any applicable Restriction of Hazardous Substances (RoHS) exemptions for our lead containing products at the user level. (Applies only if this core flux is combined with a lead-free alloy)

Reliability Properties

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

Silver Chromate: Fail
Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Fluorides by Spot Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1

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

Chloride and Bromides: 0.44%
Tested to J-STD-004, IPC-TM-650, Method 2.3.35

Availability

44 flux cored wire is available in a wide variety of alloys, wire diameters and flux percentages and roll sizes. The most common alloys are Sn63Pb37, Sn62Pb36Ag2. Please refer to www.kester.com for wire diameters, flux percentages and roll sizes that are available.

Note: Core size 50, 58 and 66 = 1.1%, 2.2% and 3.3% flux core.

Process Considerations

Solder iron tip temperatures are most commonly between 315-343°C (600-650°F) for Sn63Pb37 and Sn62Pb36Ag02 alloys. Heat both the land area and component lead to be soldered with the iron prior apply the solder wire to the land area or component lead. Do not apply the wire directly to the soldering iron tip. If needed, Kester 186 Mildly Activated Rosin Flux may be used as a compatible liquid flux to aid in reworking soldered joints. Kester 186 Mildly Activated Rosin Flux is also available in Flux-Pens® for optimum board cleanliness.

Cleaning

44 possesses excellent fluxing ability, the flux residue is non-corrosive and non-conductive under normal conditions of use. When exposed to an elevated temperature and humidity environment (38°C, 94% RH) for 72 hours, there is no evidence of corrosion caused by the flux residue. IPA will not clean the residues off the surface of the circuit board after the soldering process. A saponifier or cleaning agent specifically designed to clean a rosin based flux is required to clean the residues. Please contact Kester's Technical Support for further information.

Storage and Shelf Life

Storage must be in a dry, non-corrosive environment. The surface may lose its shine and appear a dull shade of gray. This is a surface phenomena and is not detrimental to product functionality. Flux cored solder wire has a limited shelf life determined by the alloy used in the wire. For alloys containing more than 70% lead, the shelf life is 2 years from the date of manufacture. Other alloys have a shelf life of 3 years from the date of manufacture.

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet (SDS) and warning label before using this product.