



kester®

Technical Data Sheet

88 Flux-Cored Wire for Lead-Free and Leaded Alloys

Product Description

Kester 88 Rosin Flux is an activated rosin formula for use in flux-cored solder wire. 88 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.

Kester 88 is an activated rosin (RA) flux-cored solder wire. Flux 88 consists of high quality Grade WW rosin to which has been added an extremely effective activating agent. This rosin flux formulation is the most robust RA flux available. The degree of activity has been increased to provide better fluxing action in those cases where typical RA flux will not wet metal surfaces which are excessively oxidized. 88 flux is classified as ROM1 per J-STD-004.

Performance Characteristics:

- High activity RA formulation
- Classified as ROM1 per J-STD-004
- Excellent solderability to a wide variety of metalizations such a nickel
- Compatible with leaded and lead-free alloys

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: 0.88%
Tested to J-STD-004, IPC-TM-650, Method 2.3.35

Availability

88 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, Sn96.5Ag3.0Cu0.5 and K100LD. Please refer to www.kester.com for wire diameters, flux percentages and roll sizes that are available.

Process Considerations

Solder iron tip temperatures are most commonly between 315°C-343°C (600°F-650°F) for Sn63Pb37 and Sn62Pb36Ag2 alloys. Solder tip should be 371°C-399°C (700°F-750°F). Heat both the land area and component lead to be soldered with the iron prior to applying 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

88 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.