

1588

Activated Rosin Liquid Flux

Product Description

Kester 1588 was designed for foam fluxing and high speed automated soldering of printed circuit board assembly. To meet these requirements, Kester has developed 1588 Activated Rosin Liquid Flux, consisting of high quality, purified Grade WW rosin blended into a unique solvent system. Superior fluxing ability is accomplished by the addition of very effective activating agents.

Performance Characteristics:

- High thermal stability
- Elevated activity level
- Classified as ROM1 per J-STD-004

Physical Properties

Specific Gravity: 0.850 ± 0.005

Antoine Paar DMA 35 @ 25°C

Percent Solids (typical): 20

Tested to J-STD-004, IPC-TM-650, Method 2.3.34

Flash Point: 18°C (64°F)

Reliability Properties

Copper Mirror Corrosion: Moderate

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

Corrosion Test: Moderate

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: 0.44%

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

Application Notes

Flux Application:

Kester 1588 Activated Rosin Flux can be applied by brush, dip, spray, foam or wave processes. The low air pressure required to produce a stable head of uniformly fine bubbles in a foam fluxing application results in an extremely low solvent evaporation rate. In addition to this foaming property, Kester 1588 possess a unique surface tension quality that produces particularly uniform and highly symmetrical soldered connections on the terminal points of the printed circuit board.

Process Considerations:

The optimum preheat temperature for most circuit assemblies is 90-105°C (194-221°F) as measured on the top or component side of the printed circuit board. Dwell time in the wave is typically 2-4 seconds. The wave soldering speed should be adjusted to accomplish proper preheating and evaporate excess solvent, which could cause spattering. For best results, speeds of 1.1-1.8 m/min (3½-6 ft/min) are used. The surface tension has been adjusted to help the flux form a thin film on the board surface allowing rapid solvent evaporation.

Flux Control:

Specific gravity is normally the most reliable method to control the flux concentration of rosin-based fluxes. To check concentration, a hydrometer should be used. Kester 108 Thinner is an appropriate solvent for diluting this activated rosin flux to the desired solids content and viscosity, and for restoring solvent loss through evaporation.

Cleaning:

Kester 1588 flux residues are non-conductive, non-corrosive and do not require removal in most applications. If residue removal is required, call Kester Technical Support.

Storage and Shelf Life:

Kester 1588 is flammable. Store away from sources of ignition. Shelf life is 2 years from date of manufacture when handled properly and held at 10-25°C (50-77°F).

Health & Safety:

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

World Headquarters: 515 E. Touhy Avenue, Des Plaines, Illinois, 60018 USA
Phone: (+1) 847-297-1600 • **Email:** customerservice@kester.com • **Website:** www.kester.com

Asia Pacific Headquarters
 500 Chai Chee Lane
 Singapore 469024
 (+65) 6449-1133
 customerservice@kester.com.sg

European Headquarters
 Ganghoferstrasse 45
 D-82216 Gernlinden
 Germany
 (+49) 8142-47850
 customerservice@kester-eu.com

Japanese Headquarters
 20-11 Yokokawa 2-Chome
 Sumida-Ku
 Tokyo 130-0003 Japan
 (+81) 3-3624-5351
 jpsales@kester.com.sg
