

145 Soldering Flux

Non-Activated Rosin Liquid Flux

Product Description

Kester 145 Soldering Flux is a non-activated rosin flux is a clear homogeneous solution of pure water-white rosin dissolved in a suitable solvent. The particular solvents used are liquids which exhibit the same non-corrosive and non-conductive properties as rosin itself. 145 is carefully processed to remove foreign particles found in natural rosin. Under the older MIL-F-14256, this flux was QPL approved as Type R. 145 is considerably more mobile because of its solids content and the low surface tension of the alcohol solvent. The high purity grade of alcohol solvent makes this flux very reliable for solderability testing.

Performance Characteristics:

- High quality for solderability testing
- Classified as ROL0 per J-STD-004

RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2015/863 for the stated banned substances.

Physical Properties

Specific Gravity: 0.844 ± 0.005 Antoine Paar DMA 35 @ 25 °C

Percent Solids (typical): 25

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

Flash Point: 18 °C (64 °F)

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

Chloride and Bromides: None Detected 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

Flux Application

145 is typically applied by a dip process.

Process Considerations

Kester non-activated rosin fluxes are used for applications where active flux is not permitted and critical electronic assemblies are involved. They are highly recommended for solderability testing of leads, printed circuit boards and other electrical components because of their consistently high quality.

Flux Control

Specific gravity is normally the most reliable method to control the flux concentration of rosinbased fluxes. To check concentration, a hydrometer should be used. The complex nature of the solvent system for the flux makes it imperative that Kester 4662 Thinner be used to replace evaporative losses. When excessive debris from circuit boards, such as board fibers and from the airline build up in the flux tank, these particulates will redeposit on the circuit boards which may create a buildup of residues on probe test pins. It is, therefore, necessary to clean the tank and then replenish it with fresh flux when excessive debris accumulates in the flux tank.

Cleaning

145 flux residues are non-conductive, non-corrosive and do not require removal in most applications. In the event you need to clean the residues please contact Kester Technical Support.





Storage, Handling and Shelf Life

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

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. Safety Data Sheets are available at <u>https://www.kester.com/downloads/sds</u>.

Contact Information

To confirm this document is the most recent version, please contact <u>Assembly@MacDermidAlpha.com</u>

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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