

197 Soldering Flux

Mildly Activated Rosin Liquid Flux

Product Description

Kester 197 Mildly Activated Rosin Liquid Flux is a homogeneous solution of high quality purified Grade WW rosin in a specially blended alcohol vehicle into which a very small amount of an extremely effective activating agent has been incorporated. 197 is classified as Type ROL1 flux under IPC ANSI/J-STD-004 Joint Industry Standard. 197, under MIL-F-14256, was QPL approved as Type RMA.

197 has proven to be nearly as active in fluxing ability as highly activated rosin fluxes, but the flux and its residue are considerably less conductive. The low conductivity results from a minimum of ionic activating agent as shown by the very high water extract resistivity. The rosin residue is non-corrosive, non-conductive, and moisture and fungus resistant. The dry rosin residue actually insulates the surface from atmospheric corrosion.

RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive. Additional RoHS information is located at <https://www.kester.com/downloads/environmental>.

Physical Properties

Specific Gravity: 0.896 ± 0.005

Anton Paar DMA 35N @ 25 °C

Flash Point: 18 °C (64 °F)

Percent Solids (typical): 37

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

VOC Content (g/liter): 501

Reliability Properties

Chloride: 0.029%

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

Surface Insulation Resistivity (SIR), IPC (typical): Pass

Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3

Standard Application

197 has been developed for soldering of critical electronic and electrical assemblies where a more active flux than plain rosin is required but where highly activated fluxes are considered potentially conductive. 197 is formulated for foam fluxing applications in automatic wave solder machines. The surface tension has been adjusted so that a low air pressure will produce a very uniform head of small bubbles. This flux can also be applied by dipping, brushing or spraying methods.

Flux Control:

During use, the specific gravity of the flux should be checked regularly with a suitable hydrometer to assure that the solids content is maintained at the appropriate level. The evaporated solvent can be replenished by adding Kester 108 Thinner.

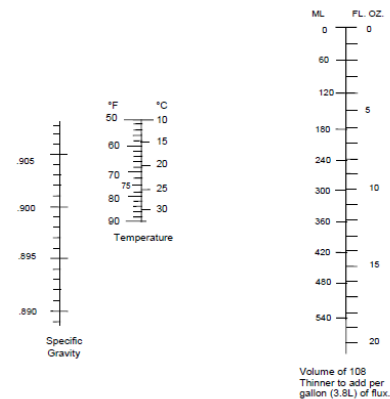
The nomograph to the right provides a quick and reliable method to determine the volume of 108 Thinner to add per gallon of 197 to return the flux to the correct specific gravity.

Procedure:

1. Check the specific gravity of the flux with a suitable hydrometer.
2. Check the flux temperature.
3. Place a ruler or straight edge on the nomograph at the specific gravity and temperature. Where the ruler intersects the third graph is the volume of 108 Thinner to add to a gallon (3.8 L) of flux.

Cleaning

Since the rosin residue is dry and practically inert after soldering, removal is usually not required. However, if necessary, the rosin residue can be completely removed with Kester 5768 Cleaner.



Storage, Handling and Shelf Life

197 is flammable. Store away from sources of ignition. Shelf life is 2 years from the date of manufacture when handled properly and held at 10 to 25 °C (50 to 77 °F). The appearance naturally darkens over time from yellow/slight amber to dark amber color.

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 <https://www.kester.com/downloads/sds>.

Contact Information

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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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