

# **KESTER® 197 SOLDERING FLUX**

Mildly Activated Rosin Liquid Flux

## DESCRIPTION

Kester 197 Soldering 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.

## READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

## **ROHS COMPLIANCE**

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive.

## **TECHNICAL DATA**

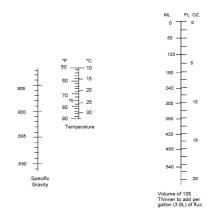
| Category  | Results       | Procedure/Remarks                                   |  |
|---|---------------|---|--|
| Physical Properties                                 |               |   |  |
| Specific Gravity                                    | 0.896 ± 0.005 | Anton Paar DMA 35N @ 25 °C                          |  |
| Flash Point   | 18 °C (64 °F) |   |  |
| Percent Solids (typical)                            | 37            | Tested to J-STD-004, IPC-TM-<br>650, Method 2.3.34  |  |
| VOC Content (g/liter)                               | 501           |   |  |
| Reliability Properties                              |               |   |  |
| Chloride  | 0.029%        | Tested to J-STD-004, IPC-TM-<br>650, Method 2.3.35  |  |
| Surface Insulation Resistivity (SIR), IPC (typical) | Pass          | Tested to J-STD-004, IPC-<br>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 suit- able 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.
- 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.





## **RECYCLING SERVICES**

We provide safe and efficient recycling services to help companies meet their environmental and legislative requirements and at the same time, maximize the value of their waste streams.

Our service collects solder dross, solder scrap, and various forms of solder paste waste. Please contact your local sales representative for recycling capabilities in your area.



#### **SAFETY & WARNING**

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.** 

### **CONTACT INFORMATION**

#### www.macdermidalpha.com

| North America         | <b>Europe</b>                                   | <b>Asia</b>  |
|-----------------------|---|--|
| 140 Centennial Avenue | Unit 2, Genesis Business Park                   | 8/F., Two Sky Parc   |
| Piscataway, NJ 08854  | Albert Drive                                    | 51 Hung To Road  |
| 1.800.367.5460        | Woking, Surrey, GU21 5RW, UK<br>44.01483.758400 | Kwun Tong, Kowloon,<br>Hong Kong, SAR China<br>852.2500.5365 |

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

DISCLAIMER: All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. No statement or recommendation shall constitute a representation unless set forth in an agreement signed by officers of seller and manufacturer. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY IS MADE. The following warranty is made in lieu of such warranties and all other warranties, express, implied, or statutory. Products are warranted to be free from defects in material and workmaship at the time sold. The sole obligation of seller and manufacturer under this warranty shall be to replace any noncompliant product at the time sold. Under no circumstances shall manufacturer or seller be liable for any loss, damage or expense, direct, indirect, incidental or consequential, arising out of the inability to use the product. Notwithstanding the foregoing, if products are supplied in response to a customer request that specifies operating parameters beyond those stated above, or if products are used under conditions exceeding said parameters, the customer by acceptance or use thereof assumes all risk of product failure and of all direct, indirect, incidental and consequential damages that may result from use of the products under such conditions, and agrees to exonerate, indemnify, defend and hold harmless MacDermid, Incorporated and its affiliates thereform. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manufacturer assume no responsibility or liability for any such infringement.

© 2019 MacDermid, Inc. and its group of companies. All rights reserved. "(R)" and "TM" are registered trademarks or trademarks of MacDermid, Inc. and its group of companies in the United States and/or other countries.

