

2125 Soldering Flux

Zero-Halogen, Organic, Water Soluble, Liquid Flux

Product Description

Kester 2125 Soldering Flux is a zero-halogen, organic acid flux designed for automated soldering of circuit board assemblies. This flux provides good activity on both bare copper and solder coated board. The absence of chlorides, bromides, phosphates and highly corrosive materials facilitates easy residue removal after soldering. 2125 produces bright, shiny solder joints and good ionic cleanliness after water cleaning. 2125 does not contain any toxic chemicals and is completely biodegradable for environmentally safe disposal of the wash water. 2125 is classified as Type ORH0 under IPC ANSI/J-STD- 004 Joint Industry Standard.

Performance Characteristics:

- Zero-Halogen
- Ease of cleaning of residues
- Chemically compatible with most solder masks and board laminates
- Classified as ORH0 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 (typical): 0.968

Anton Paar DMA 35 @ 25 °C

Acid Number (typical): 116 mg KOH/ gm

Percent Solids (typical): 11

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

Thinner: Kester 4125

Flash Point (T.O.C): 18 °C (65 °F)

Reliability Properties

Chloride and Bromide: None Detected

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

Copper Mirror Corrosion: High

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

Corrosion Test: High

Tested to J-STD-004, IPC-TM-650, Method 2.6.15

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

Tested to IPC-TM-650, Method 2.6.3.3

Test Conditions: 40 °C, 90% RH

	Blank	2125
Day 1	4.52*10 ¹⁰ Ω	2.08*10 ¹⁰ Ω
Day 4	3.67*10 ¹⁰ Ω	1.57*10 ¹⁰ Ω
Day 7	3.52*10 ¹⁰ Ω	1.40*10 ¹⁰ Ω

Flux Application

2125 can be used in a spray, foam, wave and dip application. The optimum preheat temperature for most circuit assemblies is 100 to 120 °C (212 to 248 °F) as measured on the top or component side of the printed circuit board. Dwell time in the wave is typically 2 to 4 seconds for leaded alloys and 4 to 8 seconds for lead-free alloys. The conveyor speed should be adjusted to accomplish proper board contact time with the solder. Then the preheat temperatures are adjusted to achieve the required preheat top board temperatures. In the event you need further direction on the setup of your wave soldering system, please contact Kester Technical Support.

Flux Control

Specific gravity readings should be used to keep the flux from going out of specification of 11% solids. Kester 4662 Flux Thinner should be used. The Specific Gravity is typically 0.968 +/- 10% Anton Paar DMA 35 @ 25 °C.

Cleaning

Flux residues after soldering must be removed as they are conductive and corrosive. No neutralizer, saponifiers or detergents are necessary in the water wash system for complete removal of flux residues. It is not recommended to use high mineral content tap water. Deionized or distilled water is recommended for cleaning. The recommended water temperature is 54 to 66 °C (130 to 150 °F) depending on the efficiency of the cleaning equipment and the design of the assembly.

Storage, Handling and Shelf Life

2125 is flammable. Store away from sources of ignition. Shelf life is 1 year 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 <https://www.kester.com/downloads/sds>.

Contact Information

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

North America 800 West Thorndale Avenue Itasca, IL USA 60143 Phone: +1 800.2.KESTER	Asia Pacific 8/F., Paul Y. Centre 51 Hung To Road Kwun Tong, Kowloon, Hong Kong Phone: +852.3190.3100	Europe Ganghofer Strasse 45 82216 Gerlinden, Germany Phone: +49 (0) 8142 4785 0
---	--	---

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 workmanship 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 therefrom. No suggestion for product use nor anything contained herein shall be construed as a recommendation to use any product in a manner that infringes any patent or other intellectual property rights, and seller and manufacturer assume no responsibility or liability for any such infringement.

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