



# **KESTER® 2125 SOLDERING FLUX**

Zero-Halogen, Organic, Water Soluble, Liquid Flux

### **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.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

### **FEATURES & BENEFITS**

- 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.



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# TECHNICAL DATA SHEET

### **TECHNICAL DATA**

Category	Results		Procedu	re/Remarks
Physical Properties				
Specific Gravity	0.968		Anton Pa	ar DMA 35 @ 25 °C
Acid Number (typical)	116 mg KOH/ gm			
Percent Solids (typical)	11			J-STD-004, IPC- Method 2.3.34
Thinner	Kester 4125			
Flash Point (T.O.C)	18 °C (65 °F)			
Reliability Properties				
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	
Chloride and Bromides	None Detected		Tested to J-STD-004, IPC- TM-650, Method 2.3.35	
	Pass	Metho		DIPC-TM-650, 2.6.3.3 ditions: 40 °C, 90%
Surface Insulation Resistivity (SIR), Bellcore (typical)		Blank		2125
	Day 1	4.52*10 <sup>10</sup> Ω		2.08*10 <sup>10</sup> Ω
	Day 4	3.67*10 <sup>10</sup> Ω		1.57*10 <sup>10</sup> Ω
	Day 7	$3.52*10^{10} \Omega$		1.40*10 <sup>10</sup> 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 MacDermid Alpha Technical Support.



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# **TECHNICAL DATA SHEET**

### **PROCESSING GUIDELINES**

#### 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).

### **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.





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# **TECHNICAL DATA SHEET**

#### **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**

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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 172 202, Mexico 01800 002 1400 and (55) 5559 1588

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