



2125 Soldering Flux

Zero-Halogen Organic Water-Soluble Liquid Flux

Product Description

Kester 2125 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. Formula 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

Percent Solids (typical): 11
Tested to J-STD-004, IPC-TM-650, Method 2.3.34

Flash point (T.O.C): 18°C (65°F)

Acid Number (typical): 116 mg KOH/gm

Thinner: Kester 4125

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 @ 50°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 -120°C (212-248°F) as measured on the top or component side of the printed circuit board. Dwell time in the wave is typically 2-4 seconds for leaded alloys and 4-8 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 54-66°C (130-150°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 10-25°C (50-77°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.