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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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EM808 Solder Paste Lead-Free Water-Soluble

Product Description

Kester EM808 is a lead free, organic acid, water-soluble solder paste that provides users with the highest level of consistency and performance. Batch after batch, EM808 provides hours of stable stencil life, tack time and repeatable brick definition. EM808 robust printing characteristics result in consistent solder paste volume regardless of idle time, stencil life and print speed. The activator package in the EM808 is very aggressive and provides superior wetting to OSP coated and Immersion Silver boards.

Performance Characteristics:

- Outstanding batch-to-batch consistency
- Lead-free
- Water-Soluble
- Excellent anti-slumping characteristics minimizing bridging defects
- Capable of 60 minute idle times in printing
- Print speed up to 150 mm/sec (6 in/ sec)
- Excellent solderability to a wide variety of metalizations including Palladium, leaving bright, shiny joints
- Residues easily removed with hot DI water, even up to 48 hours after soldering
- Minimal foam in wash systems
- 8+ hour stencil life
- Compatible with enclosed print head systems
- Classified as ORM0 per J-STD-004

Standard Applications:

Stencil Printing: 88% Metal Enclosed Head Printing: 88% Metal



RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2015/863 for the stated banned substances.



Data given for Sn96.5Ag3.0Cu0.5, 88% metal, -325+500 mesh)

Viscosity (typical): 1800 poise Malcom Viscometer @ 10rpm and 25°C Initial Tackiness (typical): 37 grams Tested to J-STD-005, IPC-TM-650, Method 2.4.44

Slump Test: Pass Tested to J-STD-005, IPC-TM-650, Method **Solder Ball Test:** Preferred Tested to J-STD-005, IPC-TM-650, Method 2.4.43

Wetting Test: Pass Tested to J-STD-005, IPC-TM-650, Method 2.4.45

Reliability Properties

Copper Mirror Corrosion: Low Tested to J-STD-004, IPC-TM-650, Method 2.3.32

Corrosion Test: Low Tested to J-STD-004, IPC-TM-650, Method

Silver Chromate: Pass Tested to J-STD-004, IPC-TM-650, Method 2.3.35 Chloride and Bromides: None Detected
Tested to 1-STD-004 IPC-TM-650 Methor

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

Fluorides by Spot Test: Pass Tested to J-STD-004, IPC-TM-650, Method 2 3 35 1

Surface Insulation Resistivity (SIR), (typical): Pass Tested to J-STD-004, IPC-TM-650, Method

2.6.3.3

	Blank	EM808
Day 1	1.9*10 ¹⁰ Ω	1.4*108 Ω
Day 4	1.1*10 ¹⁰ Ω	2.0*108 Ω
Day 7	8.3*10 ¹⁰ Ω	8.3*10 ⁹ Ω

Application Notes



⊘Availability

Kester EM808 is available in the Sn96.5Ag3.0Cu0.5 alloy with Type 3 powder. Type 3 powder mesh is recommended, but different powder particle size distributions are available for standard and fine pitch applications. For specific packaging information see Kester's Solder Paste Packaging Chart for available sizes. The appropriate combination depends on process variables and the specific application.

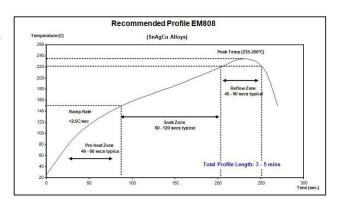
Printing Parameters

Squeegee Blade 80-90 durometer stainless steel or polyurethane

Squeegee Speed Capable to a maximum speed of 150 mm/sec (6 in/sec)
Stencil Material Stainless Steel, Molybdenum, Nickel Plated or Brass
Temperature/Humidity Optimal ranges are 21-25°C (70-77°F) and 35-65% RH

Recommended Reflow Profile

The recommended reflow profile for EM808 made with SAC alloys is shown here. This profile is simply a guideline. Since EM808 is a highly active solder paste, it can solder effectively over a wide range of profiles. Your optimal profile may be different from the one shown based on you oven, board and mix of defects. Please contact Kester Technical Support if you need additional profiling advice.



Cleaning

EM808 residues are best removed using automated cleaning equipment (in-line or batch) within 48 hours of soldering. De-ionized water is recommended for the final rinse. Water temperatures should be 49-60°C (120-140°F). Kester's 5768 Cleaner can also be used in a 1-2% ratio for aqueous cleaning systems.

Storage and Shelf Life

Refrigeration is the recommended optimum storage condition for solder paste to maintain consistent viscosity, reflow characteristics, and overall performance. EM808 should be stabilized at room temperature prior to printing. EM808 should be kept at standard refrigeration temperatures, 0-10°C (32-50°F). Please contact Kester Technical Support if you require additional advice with regard to storage and handling of this material. Shelf life is 6 months from date of manufacture and held at 0-10°C (32-50°F).

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet (SDS) and warning label before using this product.