

TSF-6522

No-Clean Tacky Soldering Flux



Product Description

Kester TSF-6522 is a no-clean tacky soldering flux formula designed to be used with a rotating disc, a doctor blade or a drum fluxer. TSF-6522 can also be used in dot dispensing for BGA/PGA sites or in a rework application for surface mount packages. TSF-6522 maintains its activity and dispensing characteristics for up to 8 hours and can be used in a wide range of temperature and humidity conditions. Kester maintains the highest standards by manufacturing TSF-6522 under a vacuum environment.

Performance Characteristics:

- High tack values and long tack life
- Leaves bright/shiny solder joints after reflow
- Can reflow in air or nitrogen environments
- Classified as ROL0 per J-STD-004B
- Compliant to Bellcore GR-78



RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2011/65/EU for the stated banned substances.



Physical Properties

Viscosity (typical): 285 poise
Malcom Viscometer @ 10rpm and 25°C

Initial Tackiness (typical): 100 grams
Tested to J-STD-005, IPC-TM-650, Method 2.4.44

Acid Number: 75.4 mg KOH/g of flux
Tested to J-STD-004, IPC-TM-650, Method 2.3.13



Reliability Properties

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

Silver Chromate: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Fluorides by Spot Test: Pass
Tested to J-STD-004, IPC-TM-650, Method 2.3.35.1

Corrosion Test: Low
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

SIR, IPC (typical): Pass
Tested to J-STD-004, IPC-TM-650, Method 2.6.3.7

	Blank	TSF-6522
Day 1	3.1*10 ¹⁰ Ω	2.6*10 ⁹ Ω
Day 4	1.3*10 ¹⁰ Ω	4.2*10 ¹⁰ Ω
Day 7	8.8*10 ¹⁰ Ω	6.4*10 ¹⁰ Ω

✓ Standard Applications

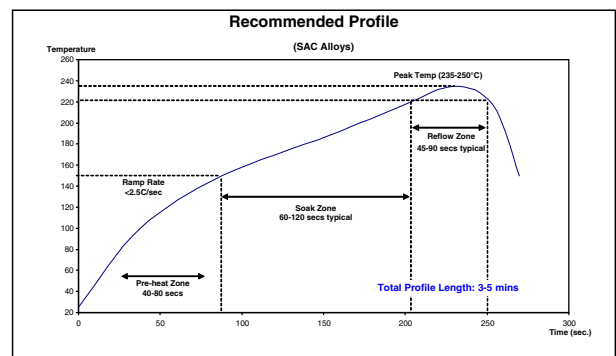
TSF-6522 was designed for pin transfer, dot dispensing and/or syringe applications. This flux can be used as a tack and flux vehicle for soldering components to a solid solder deposit (SSD), or precision pad technology (PPT) board surfaces. TSF-6522 is great for rework applications on all PCB packages. TSF-6522 can be used in BGA/PGA sphere/pin attachment vehicle or for repair and reballing/repinning. This flux works on flip chip, chip scale package and flip chip bumping sites assemblies as a soldering flux.

♻️ Printing Parameters

Temperature/Humidity Optimal ranges are 21-25°C (70-77°F) and 35-65% RH

♻️ Recommended Reflow Profile

Optimal activation temperatures are 130°-185°C (266°-365°F). See the Soak Zone in diagrams below. This allows the use of TSF-6522 in a leaded or lead-free application. In a leaded application, the soak zone time (150°C-184°C) can be 60-90 seconds. The typical peak temperature will be 205°-215°C degrees with 60-90 seconds over reflow (183°C). In a lead-free application the soak zone time (150°-217°C) can be 60-90 seconds. The typical peak temperature will be 235°-245°C degrees with 60-90 seconds over reflow (217°C).



••• Cleaning

TSF-6522 is a no-clean chemistry. The residues do not need to be removed for typical applications. If residue removal is required, call Kester Technical Support.

📦 Storage, Handling and Shelf Life

Refrigeration is the recommended optimum storage condition for TSF-6522 to maintain consistent viscosity, reflow characteristics and overall performance. TSF-6522 should be stabilized at room temperature prior to printing. TSF-6522 should be kept at standard refrigeration conditions, 0-10°C (32-50°F). Please contact Kester Technical Support if you require additional advice with regard storage and handling of this material. Shelf life is 6 months from the date of manufacture when handled properly 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 and warning label before using this product.