

KESTER® TSF-6522

No-Clean Tacky Soldering Flux

PRODCUT 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.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES & BENEFITS

- 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 @ 10 rpm 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

Copper Corrosion: Low

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

Silver Chromate: Pass

Tested to J-STD-004, IPC-TM-650, Method 2.3.33

Chloride and Bromides: None Detected

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

SIR, IPC (Typical): Pass

Tested to J-STD-004, IPC-TM-650, Method 2.6.3.7

| | Blank | TSF-6522 |
|-------|-----------------------------|-----------------------------|
| Day 1 | $3.1 \times 10^{10} \Omega$ | $2.6 \times 10^9 \Omega$ |
| Day 4 | $1.3 \times 10^{10} \Omega$ | $4.2 \times 10^{10} \Omega$ |
| Day 7 | $8.8 \times 10^{10} \Omega$ | $6.4 \times 10^{10} \Omega$ |

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.

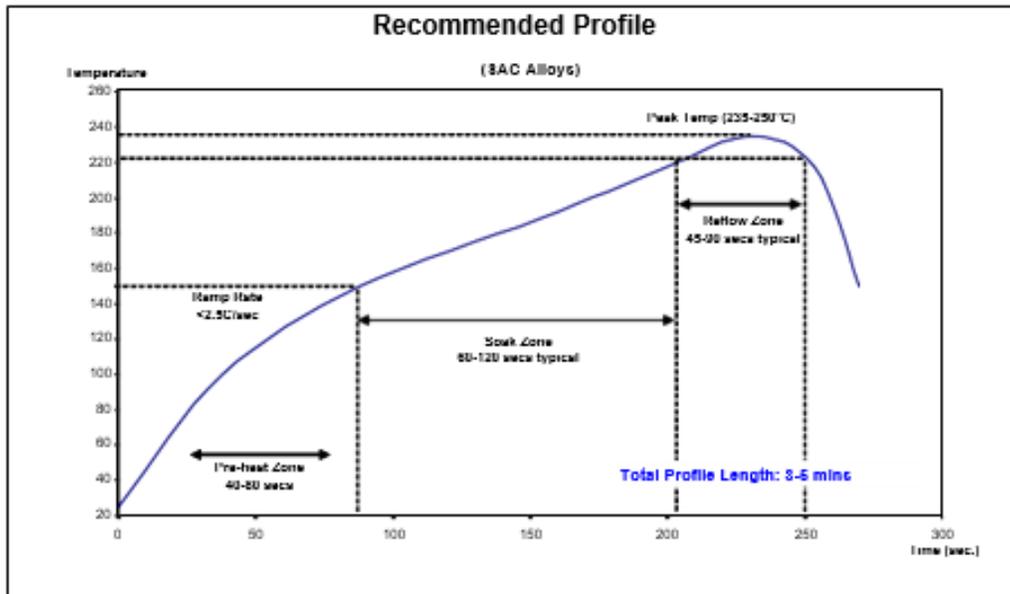
PRINTING PARAMETERS

Temperature/Humidity

Optimal ranges are 21 to 25 °C (70 to 77 °F) and 35 to 65% RH

RECOMMENDED REFLOW PROFILE

Optimal activation temperatures are 130 to 185 °C (266 to 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 to 184 °C) can be 60 to 90 seconds. The typical peak temperature will be 205 to 215 °C degrees with 60 to 90 seconds over reflow (183 °C). in a lead-free application the soak zone time (150 to 217 °C) can be 60 to 90 seconds. The typical peak temperature will be 235 to 245 °C degrees with 60 to 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

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 to 10 °C (32 to 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 to 10 °C (32 to 50 °F).

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.**

WASTE TREATMENT

Prior to using any recommendations or suggestions for waste treatment, the user is required to know the appropriate local/state/federal regulations for on-site or off-site treatment which may require permits. If there is any conflict regarding our recommendations, local/state/federal regulations take precedent.

CONTACT INFORMATION

www.macdermidalpha.com

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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 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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