

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. Kester TSF-6522 can also be used in dot dispensing for BGA/PGA sites or in a rework application for surface mount packages. Kester 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-004
- Compliant to Bellcore GR-78

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

Corrosion Test: 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 2.6.3.3

	<u>Blank</u>	<u>TSF-6522</u>
Day 1	$3.1 \times 10^{10} \Omega$	$2.6 \times 10^8 \Omega$
Day 4	$1.3 \times 10^{10} \Omega$	$4.2 \times 10^8 \Omega$
Day 7	$8.8 \times 10^9 \Omega$	$6.4 \times 10^8 \Omega$

Application Notes

Standard Applications:

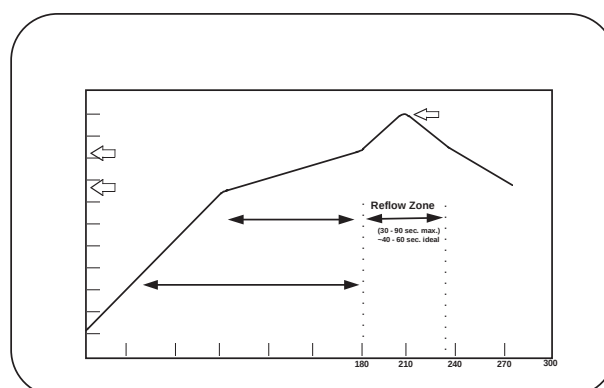
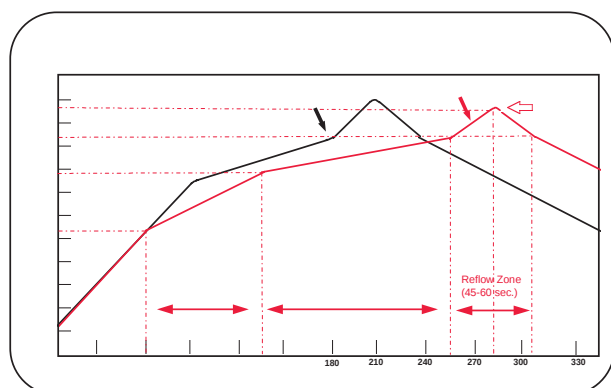
TSF-6522 was designed for pin transfer, dot dispensing and/or syringe applications. This flux can be used as a tack and flux vehicle for soldering components to a solid solder deposit (SSD), or precision pad technology (PPT) board surfaces. TSF-6522 is great for rework applications on all PCB packages. 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 Profiles:

Optimal activation temperatures are 130°-185°C (266-365°F). See "Soak Zone" in diagrams below.



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 if you require additional advice with regard storage and handling of this material. Shelf life is 3 months from date of manufacture when handled properly and held at 0-10°C (32-50°F).

Health & Safety:

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

World Headquarters: 800 West Thorndale Ave., Itasca, Illinois, 60143 USA

Phone: (+1) 847-297-1600 • **Email:** customerservice@kester.com • **Website:** www.kester.com

Asia Pacific Headquarters

500 Chai Chee Lane
Singapore 469024
(+65) 6449-1133
customerservice@kester.com.sg

European Headquarters

Zum Plom 5
08541 Neuensalz
Germany
(+49) 3741 4233-0
customerservice@kester-eu.com

Japanese Headquarters

20-11 Yokokawa 2-Chome
Sumida-Ku
Tokyo 130-0003 Japan
(+81) 3-3624-5351
jpsales@kester.com.sg