

TSF-6522RH No-Clean Tacky Soldering Flux

Product Description

Kester's TSF-6522RH is a rosin based, no-clean tacky soldering flux formula designed to be compliant with IEC 61249-2-21 definition for halide-free materials. TSF-6522RH is a formula being marketed for customers familiar with Kester's TSF 6522 formula, but now must comply with new halide-free legislation. TSF-6522RH can be used with doctor blade, or a drum fluxer. TSF-6522RH can also be used in dot dispensing for BGA/PGA sites or in a rework application for surface mount packages.

Performance Characteristics:

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

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: 165-320 poise
Malcom Viscometer @ 10rpm and 25°C, Kester Method #1W-QC-3-09

Tackiness: 58-135 gF
Kester Method #1W-QC-3-04

Acid Number: 71-82 mg KOH / gm
Kester Method #1W-QC-G-01

Color: Amber
Kester Method #1W-QC-G-18

Halogens: 650 ppm theoretical in the flux

Reliability Properties (typical)

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

Qualitative Halide Tests

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

SIR, IPC (typical): Pass
Tested to J-STD-004, IPC-TM-650, Method 2.6.3.3, B-24 coupon

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

	Blank	Uncleaned
24 Hours	1.26 *10 ¹⁰ Ω	3.16*10 ⁸ Ω
96 Hours	1.47*10 ⁹ Ω	1.84*10 ⁸ Ω
168 Hours	7.88*10 ⁹ Ω	5.20*10 ⁸ Ω

✓ Standard Applications

Tacky solder flux formulations are designed for stencil/screen printing, pin transfer, dot dispensing and/or syringe applications. TSF 6522RH can be used in BGA/PGA or CSP sphere/pin attachment process. TSF 6522RH can also be used for chip attach. If residue removal is desired it can be accomplished with solvent or semi-aqueous cleaning strategies. Misprinted substrates, components, stencils, and production tools can be cleaned using isopropanol. Although TSF 6522RH was designed for use with lead-free alloys, it also works well as a flux with eutectic Sn63/Pb37 solder.

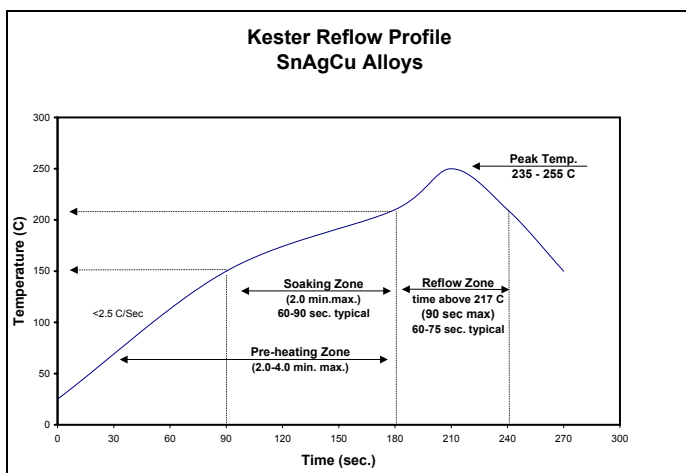
🔄 Printing Parameters

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

🔄 Activation Parameters

Temperature Optimal activation temperatures are 150-210°C (302-410°F). See the Soak Zone in diagrams below.

🔄 Recommended Reflow Profile



🔧 Cleaning

TSF-6522RH is a no-clean formula. The residues do not need to be removed for typical sphere attach applications. If TSF-6522RH is used in a chip attach application where a subsequent underfill will be used, better reliability will be achieved if the residues are removed. If residue removal is required, contact Kester Technical Support.

📦 Storage, Handling and Shelf Life

TSF-6522RH should be kept at standard refrigeration temperatures and humidity conditions, 0-10°C (32-50°F) and 35-55% RH respectively. Shelf life is 6 months from the date of manufacture when 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.