TSF-6521C

No-Clean Tacky Soldering Flux

DESCRIPTION

Kester **TSF-6521**C is a no-clean tacky soldering flux that exhibits a very high level of tack. **TSF-6521C** is designed for pick and place machines that are constantly moving the PCB at high speed doing component placement. The higher level of tack will help in limiting the amount of component displacement during component placement. **TSF-6521C** can be used in high speed dot dispensing for BGA/PGA sites or in a rework application for surface mount packages. **TSF-6521C** can also be printed utilizing standard stencil and printer parameters for use in PPT and Opti-pad processes. Kester maintains the highest standards by manufacturing **TSF-6521C** 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-004A
- Compliant to Bellcore GR-78

RoHS COMPLIANCE

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

PHYSICAL PROPERTIES

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

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

Acid Number:
75.0 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

Chlorides and Bromides: None Detected
Tested to J-STD-004, IPC-TM-650, Method 2.3.35

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

	Blank	TSF-6521C
Day 1	$3.0*10^{10}$ Ω	$6.0*10^{9}$ Ω
Day 4	$2.3*10^{10}$ Ω	$2.0*10^{9}$ Ω
Day 7	$4.0*10^{9}$ Ω	$2.0*10^{9}$ Ω

STANDARD APPLICATIONS

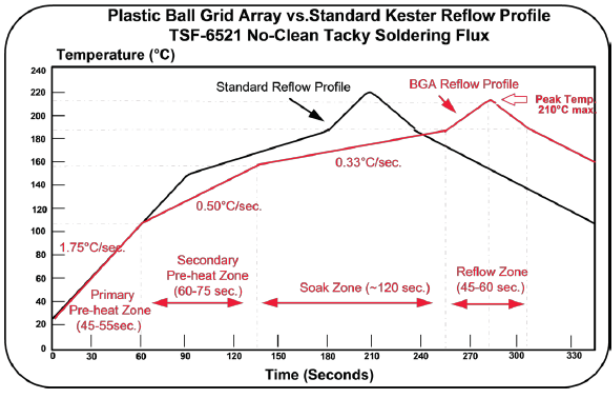
TSF-6521C was designed for stencil/screen printing, pin transfer, dot dispensing and/or syringe applications. This flux can be used as a tack and flux vehicle for soldering components to a solid solder deposit (SSD), or precision pad technology (PPT) board surfaces. TSF-6521C is great for rework applications on all PCB packages. TSF-6521C 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.

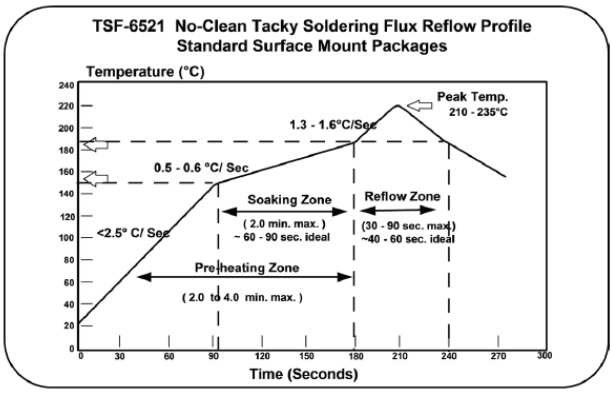
PRINTING PARAMETERS

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.





CLEANING

TSF-6521C 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.

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.**

STORAGE

Refrigeration is the recommended optimum storage condition for TSF-6521C to maintain consistent viscosity, reflow characteristics and overall performance. TSF-6521C should be stabilized at room temperature prior to printing. TSF-6521C should be kept at standard refrigeration conditions, 0 to 10 °C (32 to 50 °F). Please contact Kester if you require additional advice with regard storage and handling of this material. Shelf life is 4 months from date of manufacture when handled properly and held at 0 to 10 °C (32 to 50 °F).

CONTACT INFORMATION

To confirm this document is the most recent version, please contact techinfo@MacDermidAlpha.com

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