



# AMTECH

Advanced SMT Solder Products

**INVENTEC**  
500 Main Street, Suite 18  
PO Box 989  
Deep River, CT 06417 USA

Toll Free: 800.435.0317  
Phone: 860.526.8300  
Fax: 860.526.8243  
www.amtechsolder.com

## SynTECH-LF-TF, No-Clean Tacky Flux

### Product Data Sheet

#### Product Highlights

- ROL0 flux classification
- Wide process window
- Excellent wetting compatibility on most board finishes
- Clear residue
- Low voiding
- REACH compliant

#### Application

SynTECH-LF-TF is formulated for syringe, stencil printing, and rework applications on all PCB surface finishes. SynTECH-LF-TF may be used for BGA sphere attachment and reballing. SynTECH-LF-TF is also designed to work on all flip chip bumping and chip scale packaging sites.

#### Compatible Alloys

Alloy	Temp °C	Temp °F
42Sn/58Bi	138	280
42Sn/57Bi/1Ag	138	280
96.5Sn/3.0Ag/0.5Cu	217-220	423-428
99.0Sn/0.3Ag/0.7Cu	217-221	423-430
96.5Sn/3.5Ag	221	430
99.3Sn/0.7Cu	227	441
95Sn/5Sb	235-240	455-464
95Sn/5Ag	221-245	430-473

#### Test Results

Test J-STD-004 or other requirements (as stated)	Test Requirement	Result
Copper Mirror	IPC-TM-650: 2.3.32	L: No breakthrough
Corrosion	IPC-TM-650: 2.6.15	L: No corrosion
Quantitative Halides	IPC-TM-650: 2.3.28.1	L: <0.5%
Electrochemical Migration	IPC-TM-650: 2.6.14.1	L: <1 decade drop (no-clean)
Surface Insulation Resistance 85 °C, 85% RH @ 168 Hours	IPC-TM-650: 2.6.3.7	L: 100 M (no-clean)
Viscosity - Malcom @ 10 RPM/25 °C (x10 <sup>3</sup> mPa/s)	IPC-TM-650: 2.4.34.4	53-72
Visual	IPC-TM-650: 3.4.2.5	Clear and free from precipitation
Conflict Minerals Compliance	Electronic Industry Citizenship Coalition (EICC)	Compliant
REACH Compliance	Articles 33 and 67 of Regulation (EC) No 1907/2006	Contains no substance >0.1% w/w that is listed as a SVHC or restricted for use in solder materials

# SynTECH-LF-TF, No-Clean Tacky Flux

## Cleaning

SynTECH-LF-TF is a no-clean tacky flux that can be left on the board for many SMT assemblies. For applications requiring cleaning, SynTECH-LF-TF can be cleaned using commercially available flux residue removers such as INVENTEC Promoclean™ and Promosolv™ cleaning chemistries.

## Storage and Handling

Tacky flux should be stored at room temperature (20-25 °C). Syringes and cartridges should be stored vertically with the dispensing tip down. Properly stored tacky flux has a 12 month shelf life.

## Packaging

- 10 & 30cc syringes
- 75 & 150 gram jars
- 170 & 340 gram cartridges

## Recommended Profile

This profile is designed to serve as a starting point for process optimization using 4300/LF-4300-TF. To achieve better results with voiding or to reduce tombstoning, consider using a longer soaking zone for 60-90 seconds, with a rapid pre-heat stage. If there is evidence of solder de-wetting, consider lowering the peak reflow temperature, or reduce the time above liquidus to <60 seconds.

