



AMTECH

Advanced SMT Solder Products

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NC-560-LF, Lead Free Tacky Flux

Product Data Sheet

Product Highlights

- ROL0 flux classification
- Excellent wetting on all common finishes including Ni/Au
- Clear residue
- Low voiding
- Reduces head in pillow defects
- RoHS II and REACH compliant
- Comparable wetting performance to tin/lead process
- Print & dispense grade solder paste available.

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

Packaging

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

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: <0.05%
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 MΩ (No Clean)
Viscosity - Malcom @ 10 RPM/25 °C (x10 ³ mPa/s)	IPC-TM-650: 2.4.34.4	20-48
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

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Cleaning

NC-560-LF is a no clean tacky flux that can be left on the board for many SMT assemblies. For applications requiring cleaning, NC-560-LF can be cleaned using commercially available flux residue removers such as INVENTEC Promoclean™ and Promosolv™ cleaning chemistries.

Storage

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.

Recommended Profile

This profile is designed to serve as a starting point for process optimization using NC-560-LF. 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 <90 seconds.

Amtech Low Oxide Powder Distribution

Micon Size	Type	Pitch Requirements
45 - 75μ	Type-2	24 mil and above
25 - 45μ	Type-3	16 - 24 mil
20 - 38μ	Type-4	12 - 16 mil
15 - 25μ	Type-5	8 - 12 mil
5 - 15μ	Type-6	5 - 8 mil
2 - 11μ	Type-7	< 5 mil

Note: Type-6 and Type-7 may not be available in certain alloys.
Other powder distributions are available on request.

