Product Highlights

- n REL0 flux classification in a Water Washable Solder Paste
- n Tier I Military/Avionic OEM approved
- n Exceptional print definition at high printing speeds up to 100mm/sec
- n Residue can be left on the board in most assemblies (not recommended for high impedance assemblies)
- n Clear Residue

Test Results

- n Low voiding, including LGA components
- n Low mid-chip beading
- n REACH compliant
- n Compatible with enclosed print heads
- n Print and dispense grade solder paste available

Available Alloys

Alloy	Temp °C	Temp °F
63Sn/37Pb	183	361

Packaging

500 gram jars 700 gram cartridges 35 gram syringes

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: <.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: $\geq 100 \text{ M}\Omega$ (no-clean)
Tack Value	IPC-TM-650: 2.4.44	37g
Viscosity - Malcom @ 10 RPM/25 °C (x10 ³ mPa/s)- Sn63/Pb37 T3/T4	IPC-TM-650: 2.4.34.4	Print: 200-275 Dispensing: 100-140
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

Printer Operation

The following are general guidelines for stencil printer optimization with 4300. Some adjustments may be necessary based on your process requirements.

Print Speed: 25-100 mm/sec

Squeegee Pressure: 70-250g/cm of blade Under Stencil Wipe: Once every 10-25 prints, or as necessary

Stencil Life

> 8 hours @ 30-45% RH and 20-25 $^{\circ}\mathrm{C}$

 \sim 4 hours @ 45-75% RH and 20-25 $^{\rm C}$

Storage

Solder paste should be stored between 3-8 °C (37-46 °F) to obtain the maximum refrigerated shelf life of six months. Unopened solder paste

Amtech Low Oxide Powder Distribution

Micron Size	Туре	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

stored

at room temperature, 25 °C (77 °F) will have a one-month shelf life. Syringes and cartridges should be stored vertically in the refrigerator with the dispensing tip down. Allow 4-8 hours for solder

paste to reach an operating temperature of 20-25 °C (68-77 °F). Keep the solder paste container sealed while warming the solder paste to operating temperature. **NEVER FREEZE SOLDER PASTE**.