Product Data Sheet

**SynTECH No-Clean Solder Paste**

**Product Description**
- Synthetic materials
- Long stencil life
- Wide reflow window
- Excellent wetting compatibility
- Low voiding
- Compatible with enclosed printing heads

**Stencil Life**
- >10 hrs. @ 20-50% RH & 22-28°C
- ~6 hrs. @ 50-70% RH & 22-28°C

**Tack Value**
- Typical Tackiness - 44g force

**Alloys**
AMTECH manufactures a low-oxide, spherical and uniformly sized powder. 63Sn/37Pb, 62Sn/36Pb/2Ag, 60Sn/Pb40, 43Sn/43Pb/14Bi and 42Sn/58Bi.

**Printing**
The print definition of SynTECH is ideal for fine pitch applications. The stencil life of this no-clean product virtually eliminates waste of solder paste.

**Printer Operation**
The following are general guidelines for stencil printer optimization for SynTECH. Some adjustments maybe necessary based on your process requirements.

- Print speed: 25-100mm/sec
- Squeegee Pressure: 0.2-0.7kg/inch of blade
- Under Stencil Wipe: Once every 10-25 prints or as necessary.

**Stencil Cleaning**
Automated stencil cleaning systems for both stencil and misprinted boards. Manual cleaning using (IPA) isopropyl alcohol, works well.

**Available Packaging**
Standard packaging for stencil printing and dispensing applications.
- 250 and 500g jars
- 250 and 700g cartridges
- 750g ProFlow® cassettes
- 35 and 100g syringes

**Viscosity**
- Printing applications - 800 to 900Kcps +/- 10%
- Dispensing applications - 400 to 500Kcps +/- 10%
- Tested according to IPC-TM-650

**Storage and Handling Procedures**
Refrigerated storage of 42 - 47°F will prolong the solder paste shelf life, to no less than 1 year. Syringes & cartridges should be stored vertically with the dispensing tip down. Solder paste should be allowed to reach ambient temperature naturally, prior to use. (about 6 - 8 hours)
**Recommended Profiles:**

Profile-A was designed to serve as a starting point for process optimization using the SynTECH. A cool down rate of (-) 2 - 4°C/second is ideal for the formation of a fine grain structure without risking damage to thermally sensitive components.

When seeking to minimize voiding in BGA assemblies, a profile utilizing a soak of up to 2 minutes at 155°C may help. This will allow more time for the solder paste to outgas prior to reflow.

The information contained herein is based on technical data that we believe to be reliable and is intended for use by persons having TECHNICAL SKILL, at their own risk. Users of our products should make their own tests to determine the suitability of each product for their particular process. AMTECH will assume no liability for results obtained or damages incurred through the application of the data presented.