

Product Data Sheet for Chip Quik® Pt # SMD4300AX10 w/lead

4300 Water Washable No-Clean Solder Paste

Product Description

- Synthetic activator
- Long stencil life
- Wide process window
- Excellent wetting compatibility on most board finishes
- Low voiding, no beading, anti-tombstoning
- Compatible with enclosed printing heads

Alloys

AMTECH manufactures a low-oxide, spherical and uniformly sized powder. 4300 is available in the following alloys: 63Sn/37Pb, 62Sn/36Pb/2Ag, 60Sn/Pb40, 43Sn/43Pb/14Bi and 42Sn/58Bi.

Powder Distribution

Micron Size	Type	Pitch Requirements
75 - 45	Type-2	24mil & above
45 - 25	Type-3	16mil to 24 mil
38 - 20	Type-4	12mil to 16mil
25 - 15	Type-5	<12mil
15 - 5	Type-6	<8mil

Available Packaging

The following packaging options are available for stencil printing and dispensing applications: 250g and 500g jars; 250g and 700g cartridges; 750g ProFlow® cassettes; 35g and 100g syringes; 2,500g FreshMix® Kits.

Stencil Life

- >8 hrs. @ 30–45% RH & 22–25°C
- ~4 hrs. @ 45–70% RH & 22–25°C

Viscosity

Printing applications: 600 to 900Kcps +/-10%
Dispensing applications: 450Kcps +/-10%
Tested according to IPC-TM-650

Tack Value

Typical tackiness: 34g force

Printing

The print definition of 4300 is ideal for fine pitch applications. The stencil life of this water-soluble product virtually eliminates waste of solder paste. Consult the powder distribution chart to determine your mesh size requirements.

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: 25–100mm/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 water at 50°C or 99% isopropyl alcohol (IPA). Post-reflow cleaning using water at 50°C with 50 PSI pressure.

Storage and Handling Procedures

Refrigerated storage at 42–47°F will prolong the solder paste shelf life to no less than 6 months. 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). NEVER FREEZE SOLDER PASTE.

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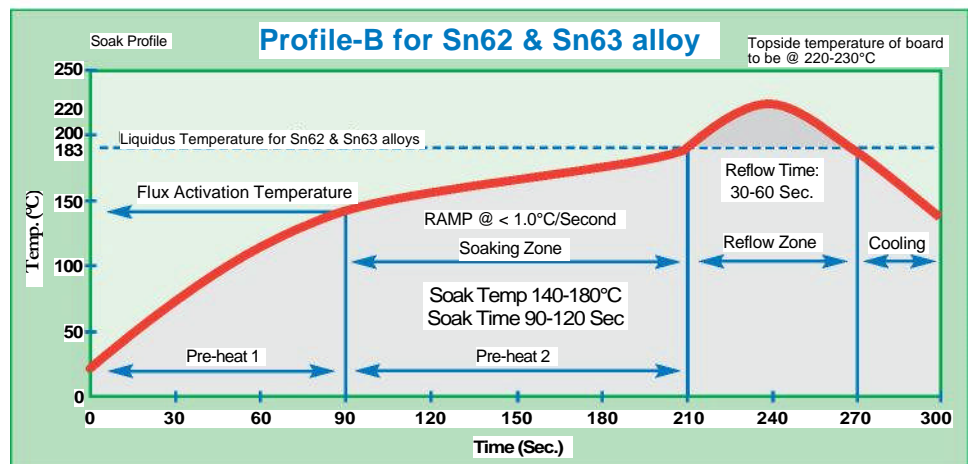
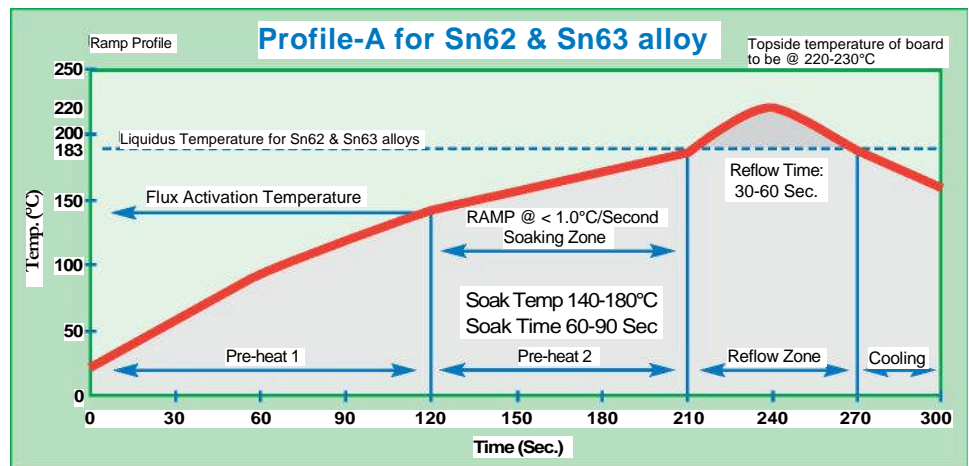
J-STD-004 (IPC-TM-650) Test Results

Test	Standard	Values	Results
Flux Designator	IPC-TM-650 2.3.35	NA	RELO
SIR Test	IPC-TM-650 2.6.3.3	9.36E+10	PASS

Recommended Profiles:

Profile-A was designed to serve as a starting point for process optimization using 4300. 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.

A profile utilizing a soak of up to two minutes at 155°C may help to minimize voiding in BGA assemblies. This will allow more time for solvent components of 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.

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AMTECH
 Advanced SMT Solder Products



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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