



SOLDER PASTE SC 111

Water washable, ISO 1.2.3.C

The solder paste SOLDER CHEMISTRY SC 111 is a high tech SMT product, which flux can be easily removed with water, before and after soldering. The development is based on the high demands of clients in the field of **SMD-production** (Chips, naked chips, chipresistors, etc.), hybrid circuits and SMT (especially in the HF area), as much as on the strict requirements of DIN-, SN-, IPC-, and MIL- standards.

The SC 111 is a homogeneous mixture of solder powder, available in all required alloys and grain sizes, and an organic flux based on water washable rosin, amine- and halide-free. The flux corresponds to the RE L0 according to J-STD-005 and thus SC 111 is one of the very best water washable solder pastes.

Besides an excellent slump resistance, no solder balling, a long stencil and tack life and high temperature stability, this paste has following advantages:

- *SC 111* soft, only with water washable residue
- *SC 111* totally resistant to humidity – for days!
- *SC 111* high tack even after hours
- *SC 111* an outstanding printability
- *SC 111* superior soldering results with bright joints even after washing
- *SC 111* excellent for fine pitch applications

PHYSICAL PROPERTIES:

Preferred alloys of solder powder: 62Sn/32Pb/2Ag and 63Sn/37Pb

Grain size definition:

SC 111	DIN 32 513	Diameter	Mesh size
Fine (F)	class 3	20-45 µm	325-500
Superfine (SF)	class 4	15-25 µm	450-700

VISCOSITY (Pa.s) +/-10% measured with Brookfield RVT-DV-II viscometer at 90% metal content

Grain size	Viscosity
Fine (F)	900

S.I.R. AND ELECTROMIGRATION comparable to DIN 32513

The figures of SIR correspond to those of the circuit boards, because the residues can be completely washed away (only!) with water without additives!

Qualification

SC 111 is a water soluble paste, which fulfils the demands of the leading companies in the SMD field. The corrosion-, solderballing-, wetting- and slump tests have been passed. Laboratory tests certify non-corrosive residues, according to RE L0, which should be completely washed away from the circuit board, because of their water solubility.

Storage

Unopened at room temperature (20°C/68°F): 6 months

Open or on the printer squeegee the processing time of course depends on the environmental influences, but in normal praxis 16h of processing time have been reached.

Application information

After using the paste close the container tightly.

Do not mix used and fresh paste, only to freshen up paste and only at work in progress.

Do not mix pastes of different kind.

Recommended squeegee speed: 15-100 mm/s.

Note: the printer is always faster than the fastest assembler in the production line.

The printer squeegee must be set to ensure that the paste performs a rolling action in front of the squeegee and does not slide!

The stencil can be washed with an alcohol mixture or water. The alcohol must not contaminate fresh paste. The paste is suitable for all common reflow systems.

Note:

The residue of our paste before and after soldering is 100% biodegradable! The sewage pollution after the use of 2kg of SC 111 is less than a washing (5 kg of laundry) in an average household.

Solder Chemistry order example

Paste	Grain size	Alloy	Flux content	Jar capacity
SC 111	F	62/36/2Ag	10%	500 g
SC 111	F	63/37	10%	500 g

Order example after DIN:

Solder paste (SC...) L-Sn62Pb2Ag / F-SW33 / 90-3 500 g (packing)

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