



## SOLDER PASTE SC 170

Type ISO 1.2.3.C

The solder paste SOLDER CHEMISTRY SC 170 is a high tech product specifically suitable for all SMT applications. Not only many years of experience in the SMT field, but also the careful and strict consideration of DIN-, SC-, IPC- and MIL- standards were part of a complete development for the future.

SC 170 is a homogeneous mixture of solder powder, in all required alloys and grain sizes, and an organic flux based on synthetic rosin, corresponding to the RE L0 according to J-STD-004 or RMA-qualification being thus one of the latest "no clean" solder pastes.

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

- \*SC 170\* minimal (4.3%), highly transparent residue, simplifying the in circuit test
- \*SC 170\* a true "no clean" paste
- \*SC 170\* contains corrosion inhibitors
- \*SC 170\* an outstanding printing quality - for hours
- \*SC 170\* excellent even for fine pitch applications
- \*SC 170\* superior soldering results with all soldering profiles and ovens
- \*SC 170\* the modified synthetic rosin composition prevents the development of tar residues in the reflow oven

### PHYSICAL PROPERTIES:

Preferred alloys of solder powder: 62Sn/36Pb/2Ag and 63Sn/37Pb

Grain size definition:

SC 170	DIN 32 513	Diameter	Mesh size
Fine (F)	class 3	20-45 $\mu\text{m}$	325-500
Superfine (SF)	class 4	15-30 $\mu\text{m}$	400-700

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

Grain size	Viscosity
Fine (F)	800 - 1000

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

Day measured	4 <sup>th</sup>	<u>21<sup>st</sup></u>
	4.4·10 <sup>13</sup>	6.8·10 <sup>12</sup>

## QUALIFICATIONS

SC 170 is an RMA paste, which fulfils the demands of MIL-QQ-S571e. The corrosion-, solderballing-, wetting- and slump (SN 59650) tests have been passed. Laboratory tests certify non-corrosive residues, which can be left on the board, even under the protective coating, as the flux corresponds to RE L0 (no clean).

## STORAGE

Unopened at room temperature (20°C/68°F): 6 months  
Open or on the printer squeegee the maximal processing time depends, of course, on the environmental influences on the paste. A storage in the refrigerator is not necessary, but a storage temperature of <22°C is recommended.

## 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.  
For stencil printing, paste with 90% metal content is recommended.  
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 but the alcohol must not contaminate fresh paste. We recommend the SC Stencil Cleaner.  
The paste is suitable for all common reflow systems.

## Solder Chemistry order example

Paste	Grain size	Alloy	Flux content	Jar capacity
SC 170	F	62/36/2Ag	10%	500 g
SC 170	F	63/37	10%	500 g

Order example after DIN:

Solder paste (SC...) L-Sn62Pb2Ag / F-SW32 / 90-3 500 g (packing)

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