



SOLDER PASTE SC BLF04

Type ISO 1.2.2.C ; J-STD-004 RE L0

The solder paste **SOLDER CHEMISTRY BLF 04** our latest product, was developed especially for all so called **lead free SMT applications**. Though thanks to the application of modern chemical substances like plastics and resins, activator systems etc. all our pastes were always able to be combined together with lead free alloys, the latest perceptions in “lead free soldering” have contributed to this new development. Of course the careful and severe consideration of the norms DIN, EN, IPC and MIL are part of this product, too.

The **BLF 04** is a homogenous mixture of a **lead free solder powder**, available in all required alloys and grain sizes, with an organic flux based on synthetic rosin, according to class RE L0 of J-STD-005 or RMA-qualifying.

Besides the outstanding slump, no making of solder balls or splashes, a long term processing time and long standing time, as well as a high temperature stability, these advantages distinguish this paste:

- * **BLF 04*** Excellent resistance against humidity. Very long stickiness!
- * **BLF 04*** Forms very homogenous and pipe free solder joints.
- * **BLF 04*** An outstanding printing quality, for hours! Stable Viscosity.
- * **BLF 04*** Few solid substances with only 5.8% residues at 89% content of metal.
- * **BLF 04*** Residues correspond to the RE L0 classification.
- * **BLF 04*** Does not leave any tar residues in your reflow system.
- * **BLF 04*** Soldering without problems even on slightly corroded surfaces.

PHYSICAL DATA

<u>Preferred alloys</u>	<u>Melting point</u>	According to international standards we deliver these alloys in the classes of:	
Sn96.5/Ag3.5	221°C	class 3	25 – 45 µm
Sn95.5/Ag3.8/Cu0.7	217 - 219°C	class 4	20 – 36 µm
Sn96.5/Ag3/Cu0.5	227°C	class 5	10 – 25 µm
Sn99.3/Cu0.7	216 – 219°C		

VISCOSITY (Pa.S)

<u>Viscosity:*</u>	Slump according to DIN32513 At the moment	20min 80°C	Solder balling acc. To IPC	Wetting acc. To IPC
650 Pa.s. powder class III	Kl.1 = 0.2	0.2		
800 Pa.s. powder class IV	Kl.2 = 0.2	0.3	1	1

*The information is founded on the measurement with the Brookfield RVT-DV-II viscometer TF 5R/pm at 25°C with the Helipath-system (+/- 10%). Paste with 90% metal content.

SURFACE RESISTANCE (SIR) and electrolytic corrosion impact according to DIN 32513

Measured on	day 4	<u>day 21</u>
	3.7×10^{11}	2.9×10^{11}

QUALIFICATIONS

The solder paste BLF 04 is an RMA-paste that accords to the requirements of the MIL-QQ-S571e. The corrosion-, solderball- and the wetting test as well as the slump (according to ISO, J-STD-004/005 L1) were passed. Laboratory research confirmed corrosion free residues, corresponding to the RO L0, which can remain on the board. If wetting of the PCB can occur during the use of it, even for a short term, appropriate measures against moisture have to be applied.

HANDLING

After taking out the paste, close the container tightly. Used paste should not be stored with fresh paste together. In the running working process it is of course allowed to mix in fresh paste to freshen up the old one. Different alloys and types of paste shall not be mixed.

Recommended squeegee speed: 15 – 100 mm/s.

Remember! The printer is always faster than the fastest assembler in the line. The most important is that the paste rolls in front of the squeegee.

For stencil printing a paste with 90% metal content is recommended.

The cleaning of the stencil can be done with an alcoholic mixture, but the cleaning medium shall under no circumstances get in contact with the paste. **We recommend thus the SC Stencilcleaner.** The solder paste is applicable with all common reflow systems.

STORAGE

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

Opened or at the squeegee of the printing device the maximum working time is dependant of the environmental influences to which the paste is exposed. **A storage in the refrigerator is not necessary!**

Solder Chemistry order example

Paste	Grain size	Alloy	Flux content	Jar capacity
SC BLF 02	F	95,5/3,8/0,7Cu	11%	500g
SC BLF 02	F	96,5/3,5	11%	500g

Order example according to DIN:

Solder Paste (SC...) L-Sn96,5Ag3,5 / F-SW 32 / 89 - 3 500g (packing)

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