



SOLDER PASTE SC BLF 082

Type ISO 1.2.3.C

The solder paste **SOLDER CHEMISTRY BLF 082** is the latest development regarding all so called **lead free** SMT-Applications and the desire of customers for an easy printable and prolonged tackiness of the paste, to be able to bridge the rest period between printing and assembly, which can be up to several days. At the same time our „trade mark“ i.e. minimal residues on the PCB, which stay close to the solder joint after soldering, were to be retained. The use of the newest types of modified plastics and rheological additives in the solder paste and thus the resulting very good possibility to combine it with lead free alloys, as well as the latest discoveries and experience with lead free soldering have contributed to this development. Of course the careful and severe consideration of the norms DIN, EN, IPC and MIL are part of this product, too.

The **BLF 082** 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 usual advantages like an outstanding slump, no making of solder balls or splashes, as well as a high temperature stability, along with a long term processing time and long standing time, these advantages distinguish this paste:

- * **BLF 082*** Excellent resistance against humidity. Stickiness for days!!!
- * **BLF 082*** Forms very homogenous and pipe free solder joints!
- * **BLF 082*** Solders without problems, even on slightly corroded surfaces. (QFN-forms!)
- * **BLF 082*** Residues are absolutely halide free. (correspond to the RE L0 classification!)
- * **BLF 082*** An outstanding printing quality, for hours, as already known!
- * **BLF 082*** Does, of course, not leave any tar residues in your reflow system.
- * **BLF 082*** Minimum, nearly invisible residues, as well as nearly no solderballing!

PHYSICAL DATA

Preferred alloys	Melting point	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	219°C	class 4	20 - 38 µm
Sn96.9/Ag2.6/Cu0.5	217-221°C	class 5	10 - 25 µm
Sn96.5/Ag3/Cu0.5	217-219°C		
Sn99.3/Cu0.7	227°C		

VISCOSITY (Pa.S)

Viscosity:*		Slump according to DIN32513		Solder balling acc. to IPC	Wetting acc. to IPC
		Immediately	20min 80°C		
900 Pas	powder class III	class 1 = 0.2	0.2	1	1
950 Pas	powder class IV	class 2 = 0.2	0.3		

*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	day 21
	1.2×10^{11}	1.8×10^{11}

QUALIFICATIONS

The solder paste BLF 082 is an RMA-paste that accords to the requirements of the MILQQ-S571e. The corrosion-, solder ball- and the wetting test as well as the slump (according to DIN 32513) were passed. Laboratory research confirmed corrosion free residues, corresponding to the RE L0, which can remain on the board.

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 88% 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 Stencil Cleaner.** The solder paste is applicable with all common reflow systems.

STORAGE

Unopened (cans!) at room temperature (prevailing at workplace): 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, in practice several weeks.
A storage in the refrigerator is not necessary!

This is how you order your Solder Chemistry paste:

<u>Paste</u>	<u>Alloy</u>	<u>Grain Size</u>	<u>Flux content</u>	<u>Jar capacity</u>
BLF 082	96.5/3Ag/0.5Cu	T3	12%	500g

Order example according to DIN:

Solder paste (SC...) L-Sn96.5/Ag3/Cu0.5 / F-SW 32 / 88 - 3 500g (packing)

Solder Chemistry ; Fragnerstrasse 4 ; D-84034 Landshut
Tel. ++49/871/4309500 ; Fax. ++49/871/43095020
e-Mail: info@SolderChemistry.com ; www.solderchemistry.com

The engineering data shown here has been compiled by Solder Chemistry using commonly accepted procedures. Although the data is considered accurate, we cannot guarantee its accuracy, the results obtained from its use, or any patent infringement resulting from its use. The data is supplied on the condition that the user shall conduct tests to determine material suitability for a particular application.