



SOLDER PASTE SC BLF01

ISO 1.2.3.C; J-STD-004 RE L0

The solder paste SOLDER CHEMISTRY SC BLF01 is a high tech product designed for the new generation of SMD technology. Many years of experience in the SMT field and well-funded knowledge in polymers chemistry were part of a complete development for the future. The SC BLF01 is like all SMT solder pastes a homogeneous mixture of solder powder, in all required alloys and grain sizes, and an organic flux based on synthetic rosin, corresponding to RE L0 according to J-STD-004 and ISO 1.2.3.C (F-SW 33) DIN 8511. **Absolutely halogen free** does not mean the SC BLF01 is it not only after the reflow, but already **free of all halogens** in the solder paste.

As metals **all lead free solders** in the melting point from 160°C to 260°C are available. Of course not only the powder class III but also the classes II, IV and V are available.

Lead free alloys, in spite of their higher melting temperatures, can be treated very well with a **synthetic flux**. Synthetic rosins offer the advance that they **nearly do not pollute reflow systems**, as they, contrary to nature and modified nature rosins, don't form any crack products, as they are fundamentally stable at higher temperatures.

The solder paste SC BLF01 distinguishes itself through an **excellent slump** not only at room temperature, but also in the pre-heat phase, and therefore has excellent qualifications for **Fine Pitch** – applications.

The synthetic basis guarantees **no side balls building** at passive components, as well as no solder balling.

A **long working time** during the whole time of production is assured.

A glasslike residue, which does not spread itself on the area of the solder, but accumulates at the solder edges, guarantees a **non-problematic „In-Circuit-test“**. Polluted testing needles belong to the past.

The **synthetic organic basis** guarantees a constant organic product. Fluctuations given through the components of nature in natural or natural modified rosins are impossible.

A **constant outstanding printing quality** thanks to a high printing strength is assured from the first to the last print on all conventional printing systems and all other systems like **Proflow, Rheomatic Pumphead and Crossflow**.

SC BLF01 is able to be used on all **reflow systems** without problems and the best soldering results.

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.

Metal alloys

<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	

General physical properties

<u>Viscosity:</u> *	Slump according to DIN32513 At the moment	20min 80°C	Solder balling acc. To IPC	Wetting acc. To IPC
700 Pa.s. powder class III	class 1 = 0.2	0.2		
800 Pa.s. powder class IV	class 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 = 90% metal content.

Surface resistance according to IPC 650: Measurement on : day 4 - 3.2×10^{13}
day 21 - 5.3×10^{13}

The solder paste SC BLF01 corresponds to the old and new standards like DIN 32513; ISO; EN29454 as to the IPC 650. Not only the residues, but also the organic composition is corresponding to the classification according to the EN 29454 1.2.3.

Handling and storage

After using the paste close the container tightly. Old paste does not belong to fresh one and shall be stored separately. As long as no flux is seen on the surface, the paste is not required to be homogenised. **Never** mix the solder paste BLF01 with other pastes, the whole positive qualities of the synthetic paste get lost.

The solder paste SC BLF01 has to **roll** in front of the squeegee, as only then each print can be successive. For fine pitch applications a stencil is absolutely necessary, just as the adjustment of the paste with 90% metal powder.

Cleaning aids, for the cleaning of the stencil, are not allowed to get in contact with the paste. For this the **SC-stencil cleaner is urgently required.**

Closed containers should be stored in a cool place, a **storage in a refrigerator is not urgently** required, storage temperatures of < 22°C are sufficient.

Packages: Jars : 200g ; 500g ; 1000g Cartridges: 600g ; 1200g proflow-box

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