The solder paste SOLDER CHEMISTRY SC BLF061 was already in development pointed onto lead free applications, what distinguishes this high-tech SMT-product. The flux is, too, before well as after the soldering very easy removeable. Its development is founded on the high demands of customers on the field of hybrid circuits and the SMT especially in the area of HF, as well as the strict and severe consideration of ISO-, EN-, IPC- and MIL-norms.

The SC BLF061 is a homogenous mixture of solder powder, available in all required alloys and grain sizes, with an organic flux based on watersoluable rosin according to class REL0 according to J-STD-004. It is halide-free and belongs to the best water washable solder paste types.

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

*SC BLF061*  soft, only with water washable residue
*SC BLF061*  a high adhesive power – for hours
*SC BLF061*  totally resistant to humidity – for days!
*SC BLF061*  an outstanding printability
*SC BLF061*  superior soldering results with bright joints even after washing
*SC BLF061*  excellent for fine pitch applications

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Preferred alloys</th>
<th>Melting point</th>
<th>According to international standards we deliver these alloys in the classes of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sn96.5/Ag3.5</td>
<td>221°C</td>
<td>class 3 25 – 45 µm</td>
</tr>
<tr>
<td>Sn95.5/Ag3.8/Cu0.7</td>
<td>217 – 219°C</td>
<td>class 4 20 – 38 µm</td>
</tr>
<tr>
<td>Sn96.5/Ag3/Cu0.5</td>
<td>217°C</td>
<td>class 5 10 – 25 µm</td>
</tr>
<tr>
<td>Sn99.3/Cu0.7</td>
<td>227°C</td>
<td></td>
</tr>
</tbody>
</table>

**VISCOSITY** (Pa.S)

<table>
<thead>
<tr>
<th>Viscosity:*</th>
<th>Slump according to DIN32513</th>
<th>Solder balling acc. To IPC</th>
<th>Wetting acc. To IPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine (T3)</td>
<td>800 Pa·s</td>
<td>class1 = 0.2</td>
<td>1</td>
</tr>
<tr>
<td>Superfine (T4)</td>
<td>900 Pa·s</td>
<td>class2 = 0.2</td>
<td>1</td>
</tr>
</tbody>
</table>

*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 IPC 650

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

SC BLF061 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!
For printing a metal content of 89% is recommended.
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 BLF06 is less than a washing (5 kg of laundry) in an average household.

Solder Chemistry order example

<table>
<thead>
<tr>
<th>Legend</th>
<th>Grain size</th>
<th>Grain size</th>
<th>Alloy</th>
<th>Flux content</th>
<th>Jar capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>z.B.</td>
<td>SC BLF061</td>
<td>T3</td>
<td>96.5/3.5Ag</td>
<td>13%</td>
<td>500g</td>
</tr>
<tr>
<td></td>
<td>SC BLF061</td>
<td>T4</td>
<td>97/Cu3</td>
<td>13%</td>
<td>200g</td>
</tr>
</tbody>
</table>

Order example after DIN:
Solder paste(SC...) L-Sn96.5Ag3.5 / F-SW 32 / 87-3 200g(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.