

## Technical Data Sheet



### ASSEMBLY MATERIALS

**Product Type:** No Clean Solder Paste

**Product Name:** F645 SA30C5-89M30

#### Description

F645 SA30C5-89M30 solder paste is a state-of-the-art halogen-zero lead free no clean solder paste that promotes wetting and minimises soldering defects. Extensive testing at customer locations has proven this paste to be capable of defect-free performance in the production environment.

#### Key Benefits

- Exceptional print to print consistency
- Outstanding wetting
- Suitable for PCB and DBC applications

#### Compliant Products

- Flux SF 64

#### Applications

- Printing

#### Product Code and Alloy

Product Code					Powder Properties		
Paste	Alloy	Metal Content	*Viscosity	Powder Type	Particle Size	Alloy	Melting Point
F645	SA30C5	89%	M	3	25 – 45 µm	Sn96.5/Ag3/Cu0.5	217 °C

\*D = Dispense grade M = Print grade H = Print grade, high L = Dipping/Jetting grade, Low

#### Flux Activity

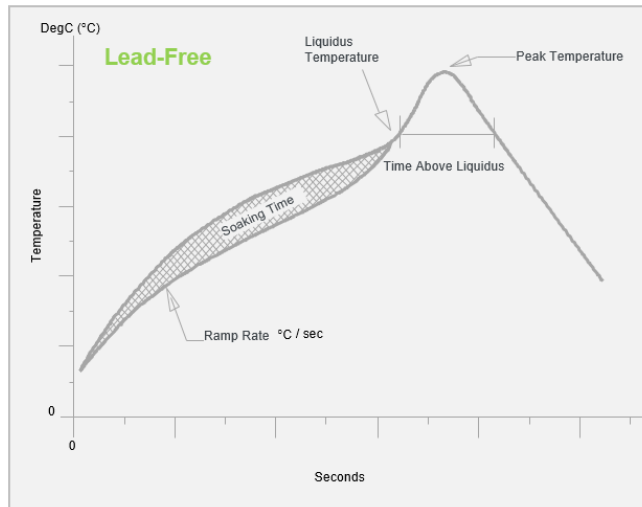
Activity Level (J-STD 004)	ISO 9454-1 {DIN EN 29454-1}	Classification
RELO	1.2.3.C	No Clean/ Solvent Clean

#### Halogen Content

Halogen-Zero (No halogen added in the flux)
Tolerances: Halogen < 50 ppm; measured according to BS EN 14582

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### Recommended Reflow Profile



\* Graph not drawn to scale

Recommended Profile	
Average Ramp Rate	1 – 3 °C/s
Peak Temperature	15 °C (min) – 40 °C (max) above Melting Temperature
Time above liquidus	45 – 90 s
Reflow Atmosphere Type 3 – 5	Reflow in Air or in N <sub>2</sub> with < 2000 ppm O <sub>2</sub>

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### Cleaning Instructions

After reflow flux residues may remain on the circuit and do not need to be washed. For cleaning of wet paste or if desired for cleaning of flux residues Zestron and Vigon cleaners can be used – see separate cleaning recommendations.

### Storage

- Store the solder paste in tightly-sealed containers and avoid exposure to sunlight and high humidity
- Max expiration date: please refer to the expiry date on the label of the packaged product
- Storage condition in the refrigerator at 2 – 10 °C
- Store cartridges with tip pointing downwards

### Paste Preparation

- Remove paste from fridge: Before opening the package, leave paste for at least 4 hours (depending on jar/ cartridge size) at room temperature, so that paste warms up
- Do not open jar/cartridge while paste is cold to prevent condensation
- Do not heat the paste beyond room temperature
- Before using of paste jar: To obtain uniform, stable viscosity stir paste for 1 to 2 min, using a stainless steel or chemically resistive plastic spatula
- For further information see Technical Information

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