

Technical Data Sheet



Product Type: No Clean Solder Paste
Product Name: Microbond® SMT911
Product Name: SOP 91121 SAC305-89M4

Description

SOP 91121 SAC305-89M4 solder paste is a ready to use solder paste series is a lead free no clean solder paste that promotes outstanding wetting and minimizes soldering defects. The SOP 91121 flux system is specifically optimized for lead free alloys, e.g. Sn/Ag/Cu. This formula provides superior performance on a variety of surfaces finishes and leaves behind a clear residue. The flux is designed to comprise with J-STD-004 L0 classification.

Key Benefits

- Exceptional print to print consistency
- Min. 8 hours tack and work life
- Very clear flux residues
- Optimized voiding under BGA and large area components

Compliant Products

- Flux SF64
- Solder Wire W640

Applications

- Printing

Product Code and Alloy

Product Code				Powder Properties			
Paste	Alloy	Metal Content	*Viscosity	Powder Type	Particle Size	Alloy	Melting Point
SOP 91121	SAC305	89%	M	4	20 – 38 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]	Siemens Norm [SN 59650]	Classification
RELO	1.2.2.C	Static qualification passed	No Clean/ Solvent Clean

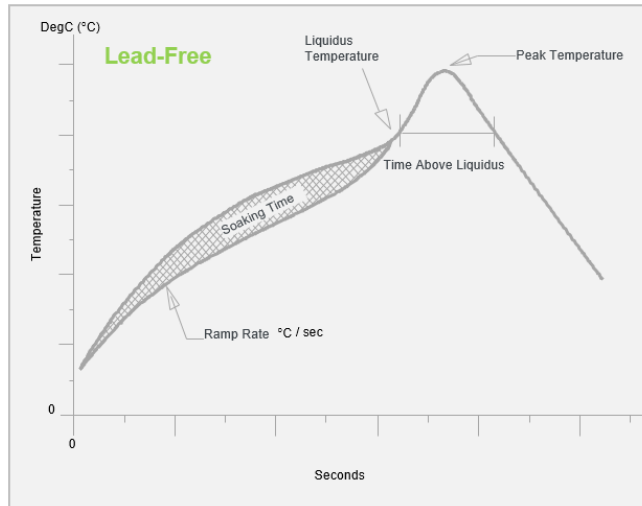
Halogen Content

Halogen-Containing

Tolerances: Cl or Br > 900 ppm, total > 1500 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 N₂ with < 2000 ppm O₂

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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 paste jar: To obtain uniform, stable viscosity stir paste for 1 – 2 min, using stainless steel or chemically resistive plastic spatula
- Caution: When automatic stirring equipment is used, do not stir the paste longer than 2 min

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