



Technical Data Sheet

MICROBOND SOP 91121 P SAC Series

Description MICROBOND SOP 91121 P SAC 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

| Product Code and Alloy | Code | | | | Powder Properties | | | Application | | |
|------------------------|--------|-------|---------------|-----------|-------------------|--------------------|-------|-------------------------------------|--------------------------|--------------------------|
| | Paste | Alloy | Metal Content | Viscosity | Powder Type | Particle Size | Alloy | Melting Point | Stencil Printing | Screen Printing |
| SOP 91121 SA30C5 | SA30C5 | 89 | M | 3 | 25 - 45 µm | Sn96,5/Ag3,0/Cu0,5 | 217°C | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| SOP 91121 SA30C5 | SA30C5 | 89 | M | 4 | 20 - 38 µm | Sn96,5/Ag3,0/Cu0,5 | 217°C | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| SOP 91121 SAC105 | SAC105 | 89 | M | 3 | 25 - 45 µm | Sn98,5/Ag1,0/Cu0,5 | 227°C | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| SOP 91121 SAC105 | SAC105 | 89 | M | 4 | 20 - 38 µm | Sn98,5/Ag1,0/Cu0,5 | 227°C | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | | | | | | |
|----------------------|-------------------------------------|--------------------------|--|------------------------|---|---|
| Flux Activity | No Clean | Water Washable | ISO 9454-1:1990 [DIN EN 29454-1:1993] | J-STD-004A:2004 | Bellcore GR-78-Core [Issue 1:1997] | Siemens Norm [SN 59650:1998] |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1.2.2.C | LO | not tested | static qualification passed |

Halogen Content

Halogen Free
Halogen Free-Tolerances from IEC 61249-2-21: Cl or Br <900 ppm, total <1500 ppm; measured according to BS EN 1458

Halogen Zero - No Halogen added in the Flux:
Halogen Zero - Tolerance: Halogen < 50 ppm; measured according to BS EN 14582

Paste Conditioning

Remove paste from fridge: Before opening the package leave paste 2 hours at room temperature so that paste warms up. Do not open jar/cartridge while paste is cold to prevent condensation of moisture on the paste - this causes defects, e.g. solder balling etc. Do not heat the paste.
 Before use of paste jar: To obtain uniform, stable viscosity stir paste for 1 to 2 min, using a stainless steel or chemically resistive plastic spatula.
 Caution: When automatic stirring equipment is used, do not stir the paste longer than 2 min.

Reflow

Peak temperature: 20-30°C above the melting temperature of the alloy. Time above melting temperature: 30 to 90 seconds.

Cleaning

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 conditions in the refrigerator at 2-10°C.

Contact www.heraeus-contactmaterials.com **Version** TDS_SOP 91121 P SAC Series_28.06.2013

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