

Technical Data Sheet

F 169 SA30C5-86D30

No Clean Solder-Paste for Dispensing



1. Description

F169SA30C5-86D30 is a ready-to-use homogeneous mixtures low odour characteristics, consisting of metal powder, binders, solvents, fluxes and thixotropic agents.

Although this paste is optimised for dispensing application, it has a very low slump. Due to very small powder particles it can be dispensed through small needles without danger of clogging.

F169SA30C5-86D30 provides a good wettability and leaves clear flux residues.

It does not contain any halogen activators. The flux of F169SA30C5-86D30 has passed all tests for no clean solder pastes according to Siemens-standard SN 59650 (issue July 1994).

Due to its limited tack time this solder paste is suitable only for in-line production.

Key Benefits

- Excellent dispensability
- Stable viscosity
- Very low slump

2. Product indication

Indication: F169SA30C5-88D30

Alloy: Sn96,5/Ag3/Cu0,5

3. Physical properties:

Metal powder:

Particle size: Typ 3 = 25 –45 µm (325/+500 mesh)

Shape: Spherical

Melting Point: Sn96,5/Ag3/Cu0,5 =217°C

Composition: Sn96,5/Ag3/Cu0,5 = F169SA30C5-86D30

Density: Sn96,5/Ag3/Cu0,5 = 7,4 g/cc

Solder Paste:

Metal Content: 86%

Viscosity Range: Physica CSR D=10 s⁻¹ : 35-80 Pas

Density: N/a

4. Reflow Parameters (recommendation)

- Reflow should be done under an inert atmosphere.
- For soldering under air we recommend a linear reflow profile.

5. Residue properties

Flux Activity:	According to ANSI- J-STD-004	Klasse L0
	DIN EN 29454-1	1.1.3.C

6. Recommended Processing Guidelines

- Ensure that the paste has reached room temperature before opening, to prevent condensation.
- The flux residues don't need to be cleaned. They may remain on the circuit.
- For dispensing: depending on the nozzle-shape down to 0,3-0,4 mm. Cone-shaped nozzle is preferred.
- Clean wet paste with diverse Zestron and Vigon cleaning materials.
- The peak temperature depends on the heat capacity of the components.

7. Storage

- Store the solder paste in tightly-sealed syringes and avoid exposure to sunlight and high humidity.
- Min. 3 month in a refrigerator at 2-10°C
- Store syringes vertically, with tip down.

Ra 091008

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

Production Locations		
Europe	America	Asia
W. C. Heraeus GmbH Contact Materials Division Hanau, Germany Phone: +49 6181 35 5265 cmdinfo@heraeus.com	Heraeus Incorporated Contact Materials Division West Conshohocken, PA, USA Phone: +1 610 825 6050 customerservice.hcd@heraeus.com	Heraeus Ltd. Contact Materials Division On Lok Tsuen, Fanling, Hong Kong Phone: +852 2675 1200 cm.hlh@heraeus.com
W. C. Heraeus GmbH Contact Materials Division Potsdam, Germany Phone: +49 331 74616 00 juergen.schulze@heraeus.com	www.heraeus-cmd.com	Heraeus Materials Technology Shanghai Contact Materials Division Shanghai, P.R.C. Phone: +86 21 3357 5688 hmts@heraeus.com