

Technical Data Sheet

ASSEMBLY MATERIALS

Product Type: Conductive Adhesive

Product Name: PC 3000

Description

PC 3000 is a thermosetting, one-component, solvent-free, silver-filled epoxy conductive adhesive, designed for the connection of electronic (SMDs) and bare dies with LTCC and ceramic substrates.

Key Benefits

- High electrical and thermal conductivity
- Very low degassing
- High reliability

Compliant Products

- SMT Adhesive: PD 955 M

Applications

- Printing

Physical Properties

Processing Life (h)	Curing Profile	Substrate and Components
Approx. 32	10 min / 150 °C 20 min / 120 °C	Substrate Materials: LTCC, Al ₂ O ₃ - Ceramic, lead frames and flexible substrates
Adhesion (N/mm ²) <i>Standard: DIN EN 1465</i>	Weight Loss during Curing Process at 150 °C (%)	Glass Transition Temperature (°C)
Min. 8	Max. 0.8	Approx. 41
Thermal Conductivity (W/mK)	Volume Resistivity (mΩ.cm)	
Min. 5	Max. 0.2	

Halogen Content

Hydrolyse Halogen

Tolerance: Halogen < 50 ppm

Cleaning Instructions

The uncured adhesive can be removed with Zestron HC and other Zestron and Vigon cleaning materials. The cleaned parts must be completely dry before installing them in the machine. Defective components can be removed by heating the cured adhesive joint with hot air above 250°C. The hot remaining adhesive can be removed with a sharp tool.

Adhesive Conditioning

- Remove adhesive from freezer: Before opening the package leave it for at least 2 hours at room temperature so that adhesive heats up
- Do not open jar/cartridge while adhesive is cold to prevent condensation
- Do not use faster defrost systems
- Before use of adhesive jar: To obtain uniform, stable viscosity stir adhesive 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 adhesive for longer than 2 min. For further information see Handling Instructions

Technical Data Sheet

Storage

- Store the adhesive in tightly-sealed containers and avoid exposure to high humidity and sunlight
- Max. expiration date: Shelf life: Please refer to the expiry date on the label of the packaged product
- Storage condition in the freezer at – 40 °C

Heraeus Electronics
Heraeus Deutschland GmbH & Co. KG
Heraeusstraße 12 – 14
63450 Hanau, Germany
www.heraeus-electronics.com

Americas
Phone +1 610 825 6050
electronics.americas@heraeus.com

Asia Pacific
Phone +65 6571 7677
electronics.apac@heraeus.com

China
Phone +86 21 3357 5457
electronics.china@heraeus.com

Europe, Middle East and Africa
Phone +49 6181 35 3069, +49 6181 35 3627
electronics.emea@heraeus.com