

## PC3000

### Conductive Adhesive

#### Description

PC3000 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 Features

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



*This picture does not show the packaging of PC3000 and is solely intended for illustration purposes. The products are available in different packaging configurations and may change over time. Please refer to the latest safety data sheets for safety-relevant pictograms.*

#### Physical Properties

Processing Life (h)	Approx. 32
Curing Profile	10 min / 150 °C 20 min / 120 °C
Substrate and Components	Substrate Materials: LTCC, Al <sub>2</sub> O <sub>3</sub> – Ceramic, lead frames and flexible substrates
Adhesion (N / mm <sup>2</sup> ) Standard: DIN EN 1455	Min. 8
Weight Loss during Curing Process at 150 °C (%)	Max. 0.8
Glass Transition Temperature (°C)	Approx. 41
Thermal Conductivity (W/mK)	Min. 5
Volume Resistivity (mΩ.cm)	Max. 0.2
Applications	Printing
Compliant Products	SMT Adhesive: PD955 M
<b>Halogen</b>	
Halogen content	Hydrolyse Halogen
Tolerance	Halogen < 50 ppm

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 particular application. The Heraeus logo, Heraeus, Welco™, Microbond® and mAgic®, and the Welco, Microbond and mAgic figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.

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#### 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 minutes, 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 minutes. For further information see "Handling Instructions"

#### 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.

#### Storage Conditions

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

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