

Product Description

Modified epoxy | 1 part | solvent-free | thermal-curing | thermally conductive | electrically conductive

- Electrically conductive bonding
- Contacting of electronic components
- Good conductivity
- Silver filled
- Shape retaining

Curing Properties

This adhesive must be cured with heat. Typical curing temperatures are listed in the table below.

Temperatures	Time
80°C	6 h
110°C	45 min
120°C	30 min
130°C	15 min
150°C	10 min

The heat cure times are only provided as a guideline. They are derived from curing a 2g adhesive sample without affixed substrates in a laboratory environment. Actual cure times can vary based on part size, configuration, adhesive volume and temperature control required for the component substrates to attain oven temperature.

The final bond strength of the adhesive is achieved no sooner than 24 h after the bonded components are removed from the oven.



Resin Epoxy Appearance Grey Filler weight [%] Filler weight [%] Incured Material 0 Uncured Material 20,000 – 40,000 Viscosity (mPas) (Kinexus Rheometer, 25 °C, 10s °I) 20,000 – 40,000 PE-standard 064 5.5 – 7.0 Density (g/cm³) 2.6 – 2.8 ØF-Standard 064 2.6 – 2.8 Ør nom temperature 14 Ør nom temperature 70 – 80 Ør nom temperature 70 – 80 PE-Standard 006 70 – 80 Temperature resistance [°C] -40 – 180 Linear shrinkage [%] -2 PE-Standard 016 -2 Glass transition temperature - DSC [°C] 90 – 130 Coefficient of thermal expansion [ppm/K] below Tg 200 – 400 PE-Standard 017 1 × 10° – 5 × 10° – Coefficient of thermal expansion [ppm/K] below Tg 200 – 400 PE-Standard 017 1 × 10° – 5 × 10° 3 Coefficient of thermal expansion [ppm/K] below Tg 200 – 400 PE-Standard 017 1 × 10° – 5 × 10° 3	Technical Data	
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PE-Standard 013		0-11



Transport/Storage/Shelf Life

Package type	Transport	Storage	Shelf life*
Syringe/Cartridge	0°C – 10°C		At delivery
Other packages		0°C – 10°C	min. 3 months max. 6 months

*Store in original, unopened containers!

Instructions for use

Surface preparation

The surfaces to be bonded should be free of dust, oil, grease, mold release, or other contaminants in order to obtain an optimal and reproducible bond. For cleaning we recommend the cleaner IP[®] from Panacol, or a solution of Isopropyl Alcohol at 90% or higher concentration. Substrates with low surface energy (e.g. polyethylene, polypropylene) must be pretreated in order to achieve sufficient adhesion.

Application

Our products are supplied ready to use. Depending on the packaging, our adhesives may be dispensed by hand directly from the package, or they can be applied using dispensing systems and automation. Many commercially available valve and controller options are available to ensure accurate and consistent adhesive dispensing. For assistance with dispensing and curing questions, please contact our Applications Engineering department. Adhesive and substrate should not be cold for proper bonding. They must be allowed to warm to room temperature prior to processing. After curing, the adhesive must be allowed to cool to ambient temperature before testing the product's performance. For safety information refer to our Material Safety Data Sheet (MSDS).

Storage

Store uncured product in its original, closed container in a dry location. Any material removed from the original container must not be returned to the container as it could be contaminated. Panacol cannot assume responsibility for products that were improperly stored, contaminated, or repackaged into other containers.

Handling and Clean-up

For safe handling information, consult this product's Material Safety Data Sheet (MSDS) prior to use. Uncured material may be wiped away from surfaces with organic solvents. Do not use solvents to remove material from eyes or skin!



Disclaimer

The product is free of heavy metals, PFOS and Phthalates and is conform to the current EU-Directive RoHS.

THE VALUES NOTED IN THIS TECHNICAL DATA SHEET ARE TYPICAL PROPERTIES AND ARE NOT MEANT TO BE USED AS PRODUCT SPECIFICATIONS.

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> Page 4/4 Updated 16.09.2024 Revision: 6 DIN ISO 9001 certified