Technical Datasheet
Elecolit® 6207

Product Description

Panacol Elecolit® adhesives are solvent free single or two-component adhesives. They are mostly based on epoxy resin and can be cured at room temperature or by exposure of heat. Elecolit® adhesives are electrically and / or thermally conductive adhesives which are designed for potting, bonding or contacting of conductors.

Elecolit® 6207 is a 2-component thermal conductive epoxy resin potting and capping compound that cures at low temperatures or at room temperature. Elecolit® 6207 is tested for UL-94V-0 (1/4 "layer thickness). It has good temperature shock resistance and low shrinkage.

Curing Properties

This product is a two-component adhesive. The adhesive can be cured at room temperature or thermally under exposure to heat after mixing the two components in the ratio indicated. Possible curing temperatures are listed in the table below.

Thermal curing	
Time at 25°C	7 days
Time at 65°C	2 h

The adhesive can be applied after mixing the components within the pot life. To determine the pot life, the time it takes to double the increase in viscosity after mixing of the two components is used.

Curing	
Pot life	2 h
Mixing ratio	1:1

The curing times given are guidelines. They refer to the curing of 2 g of adhesive. The heating up of the joining members are not taken into account.

The final strength of the adhesive is reached at the earliest after 24 h.

Technical Data

Resin	epoxy
Appearance	black
Filler	aluminium oxide
Filler – weight [%]	60

Uncured material

Viscosity mix [mPas]	9 000 - 12 000
Dichte [g/cm³] *PE-Norm 004*	1,6

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Cured material

Hardness shore D *PE-Norm 006*	76
Temperature resistance [°C]	-55 - 150
Shrinkage [%] *PE-Norm 031*	<1
Water absorption [mass %] *PE-Norm 016*	<1

Glass transition temperature DSC [°C] *PE-Norm 009*	35 - 40
Coefficient of thermal expansion [ppm/K] below Tg *PE-Norm 017*	15
Coefficient of thermal expansion [ppm/K] above Tg *PE-Norm 017*	130

Thermal conductivity [W/m*K] *PE-Norm 062*	1
Dielectric constant [10kHz]	4
Dielectric strength [kV/mm]	16
Volume resistivity [Ohm*cm] *PE-Norm 040*	3,E+14

Lap shear strength (Al/Al) [MPa] Curing 2h at 65°C *PE-Norm 013*	16
Lap shear strength (steel/steel) [MPa] Curing 2h at 65°C *PE-Norm 013*	20
Lap shear strength (steel/steel) [MPa] Curing 48h at room temperature *PE-Norm 013*	15

Transport/Storage/Shelf Life

Trading unit	Transport	Storage	Shelf-life*
Other packages	at room temperature max. 25°C	0°C - 10°C	at delivery min. 6 months max. 12 months

Store in original, unopened containers!

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Instructions for Use

Surface preparation

The surfaces to be bonded should be free of dust, oil, grease or other dirt in order to obtain an optimal and reproducible bond.

For cleaning we recommend the cleaner IP® Panacol. 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 packaging they can be applied by hand directly from the container or semi or fully automatically. With automated application from the cartridge the adhesive is conveyed by a compressed air-operated displacement plunger via a valve in the needle. When metering low viscosity materials from bottles the adhesive is transported by a diaphragm valve. If help is required, please contact our application engineering department.

Adhesive and substrate may not be cold and must be warmed up to room temperature prior to processing.

For safety information refer to our safety data sheet.

Disclaimer

The product is free of heavy metals, PFOS and Phthalates and is conform to the EU-Directive 2017/2102/EU "RoHS III".

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