



Polytec TC 435

Polytec TC 435 is a two component, thermally conductive adhesive and potting material

Typical Properties

Number of components	2
Mixing ratio by weight	
Part 'A' (resin)	1
Part 'B' (hardener)	1
Pot Life at room temperature	8 - 10 Hours
Shelf life at room temperature	6 Months
Viscosity (84 rpm @ 23°C)	7500 - 8000 mPa s
Consistency	Soft thixotropic paste
Specific Gravity (mixture)	1,7 g/cm ³
Filler	BN/MgO
Max. Particle size	<30 µm
Color	Off-white

Minimum Bond Line Cure Schedule

120 °C	4 Hours
150°C	30 Minutes

Thermal Properties

Glass Transition Temperature (Tg)	130°C
Continuous Operating Temperature	-55°C / 230°C
Intermittent Operating Temperature	-55°C / 300°C
Degradation Temperature	385°C
Thermal Conductivity	> 1 W/m ² K

Mechanical Properties

Shore- Hardness	D75
Die Shear Strength	>60 N/mm ²

Polytec TC 435 is a two component, thermally conductive adhesive and potting material to protect sensors and other electronic parts against moisture, heat and chemicals. It has an excellent adhesion to ferrous and non-ferrous metals, glass, ceramics, and most plastics. Its unique viscosity allows dipping of sensor heads to create a drop-like ceramic protection layer. It is suitable for high Volume sensor production. Single and multiple layers can be applied to the substrate. Due to its high Tg and operating temperature it is suitable for high temperature wire bonding and reflow soldering processes.

Features:

- Excellent moisture and chemical resistance
- Very good thermal conductivity
- High Glass Transition Temperature
- Excellent thermal stability
- Electrically insulating
- Optimized viscosity for dipping sensors

Processing:

- Dispensing
- Screen Printing
- Dipping

Available Pack Sizes:

- See price list / Customized Packaging
- Also available as single component, premixed frozen version **Polytec TC 435-frozen**

For more information, see:

- MSDS of Polytec TC 435
- Application notes
- Catalogue

Please note:

The above listed information are typical data based on tests and are believed to be accurate. Polytec PT makes no warranties (expressed or implied) as to their accuracy. The above listed data do not constitute specifications. The processing (in particular the cure conditions) of the material, the process control and the variety of different applications at various customers are not under Polytec PT's control. Therefore Polytec PT will not be liable for concrete results in any specific application or in any connection with the use of this product. In particular the cure conditions do have a major effect on the properties of the cured material. Therefore it is highly recommended to keep the cure schedule – once established - under tight control. With the release of this data sheet all former data sheets will be null and void.

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