# DIAPOL 509, flexible Temperature resistance -50°C + 130°C



MIX 100/10 10000 ± 2000 1,55 ± 0,02

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#### **PRODUCT DESCRIPTION**

- ✓ Resin without solvent
- √ 100% polymerizing
- ✓ Low level of water absorption
- ✓ Hardening at room temperature
- √ No chemical aggression
- ✓ Low exothermic reaction
- High level of adherence to metals and plastics

### **APPLICATION**

DIAPOL 509 is a molding resin with multiple electrical and electronic applications (e.g. transformers, capacitors, printed circuits, electromagnets, etc.)

## **HOW TO USE**

DIAPOL 509 resin, is supplied in two separate and previously pre-dosed components the resin and CATALYST 500. The normal color is grey, but can be in other color. The ratio of mix weighting (Resin/Catalyst) is 100/10. The air-tight and pre-sealed containers must be stored at room temperatures (15-25°C), thus ensuring shelf life of 1 year. Due to the fact that the mineral content tends to be deposited at the bottom of the container over time, the resin must be well stirred before use. DIAPOL 509 resin can be mixed with its catalyst at room temperature at a dosage of 100/10. However to achieve a higher quality finish for the application, pre-heating of the resin to approx. 50°C is recommended. The use of automatic mixing/dosing machines is recommended for the handling of this product. If you want to peel off the polymerized resin, we recommend using EURO-SILICON spray. In the case of closed parts, which must have maximum electrical characteristics, it is recommended that the forming takes place in a vacuum.

CHARACTERISTICS	<b>DIAPOL 509</b>	<b>CATALIZATOR 500</b>
Viscosity at 25ºC (mPa·s)	12000 ± 2000	200 ± 50
Density at 20°C (g/cm3) )	1,55 ± 0,04	1,23 ± 0,01
Pot Life at 25°C (min)		120-140
Complete polymerization		10 hours at 60°C
Shore A hardness		80 ± 5
Tensile strength (Mpa)		1.8
Ultimate elongation (%)		10
Water absorption 24 h. 20°C (% weight)		0.1-0.2
Dielectric strength 50Hz, 20ºC (kV/mm)		15
Surface resistivity (Ohm)		3.10 <sup>14</sup>
Specific resistance (Ohm/cm)		3.10 <sup>16</sup>
Thermal conductivity (W/mK)		0.5-0.6
Martens point (°C)		20

#### **PACKAGES**

The product is available in 1kg, 5kg and 25kg packages. Available on request in packages of 140kg, 300kg and 1000kg.