

## **WEVO-Casting Resin PU 570**

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Two-component encapsulating system based on polyurethane. The resin component is formulated with a non-abrasive mineral filler.

The cured polymer exhibits tough-elastic properties. The product processes good thermal endurance and thermal conductivity as well as excellent behavior in thermal cycle tests.

Temperature range of use: -25°C to +130°C .

The casting resin is used with **WEVO-Hardener 300**

Applications:      Encapsulation of electrical components for low and medium voltage applications.

### Product Specification:

<u>Mixing ratio:</u>	by weight: 100 parts Casting Resin PU 570 20 parts Hardener 300		
<u>Viscosity (22°C):</u>	Casting Resin PU570:	3.500 -	4.600 mPa·s
	Hardener 300:	70 -	120 mPa·s
	Mixture:	1.500 -	2.000 mPa·s
<u>Density (22°C):</u>	Casting Resin PU570:	1,56 -	1,59 g/cm³
	Hardener 300:	1,20 -	1,24 g/cm³
<u>Colour:</u>	Casting Resin PU570:	black or as requested	
	Hardener 300:	dark brown	
<u>Potlife (250g):</u>	30 - 50 minutes	at room temperature	
	The curing time depends on the temperature, the potlife, the thickness of the layer and the casting volume.		
<u>Curing time:</u>	12 - 24 hours	at room temperature	
<u>Final hardness:</u>	10 - 14 days	at room temperature	

*It is possible to accelerate the potlife and curing time as requested.*

### **Physical Properties:**

<u>Shore-Hardness D:</u>	65 - 70	ISO 868, DIN 53505
<u>Tensile strength:</u>	6 N/mm <sup>2</sup>	ISO 527-2
<u>Elongation at break:</u>	60 %	ISO 527-2
<u>Modulus of elasticity:</u>		ISO 527-2
<u>Thermal conductivity:</u>	0,56 W/m·K	ISO 8894
<u>Glass transition temperature:</u>	8 °C	TMA
<u>Coefficient of Expansion:</u>	72 ppm/K 170 ppm/K	< 0°C, TMA > 10°C, TMA
<u>Thermal class:</u>	B	IEC 60085
<u>Shrinkage after curing:</u>	1 %	
<u>Water absorption:</u>	0,4 %	after 30 days immersion
<u>Flammability classification:</u>	HB	UL94

### **Electrical Properties:**

<u>Dielectric strength:</u>	28 kV/mm	IEC 60243-1 VDE 0303, TI.2
<u>Volume resistance:</u> 23°C/50% r.h.	10 <sup>14</sup> Ω·cm	IEC 60093 VDE 0303, TI.30
<u>Surface resistance:</u> 23°C/50% r.h.	10 <sup>15</sup> Ω	IEC 60093 VDE 0303, TI.30
<u>Dielectric constant ε:</u> at 50 Hz, 23°C	5,6	IEC 60250 VDE 0303, TI.4
<u>Dissipation factor tan δ :</u> at 50 Hz, 23°C	0,12	IEC 60250 VDE 0303, TI.4
<u>Comparative tracking index:</u>	CTI 600	IEC 60112 VDE 0303, TI.1

Packaging: 5 kg, 10 kg and 30 kg-buckets 250 kg drums

Shelf life: in original closed cans or drums, dry storage between 15°C and 25°C, 6 months.

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