

WEVO-Casting Resin PU 951

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 as well as outstanding adhesion to most plastic materials, metals and glass and excellent behavior in thermal cycle tests.

Temperature range of use: -50°C to +120°C .

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

Applications: Encapsulation of electrical components for low and medium voltage applications like sensors, switches or PCBs.

Product Specification:

<u>Mixing ratio:</u>	by weight: 100 parts Casting Resin PU 951 14 parts Hardener 300		
<u>Viscosity (22°C):</u>	Casting Resin PU951:	1.300 -	1.600 mPa·s
	Hardener 300:	70 -	120 mPa·s
	Mixture:	1.000 -	1.300 mPa·s
<u>Density (22°C):</u>	Casting Resin PU951:	1,28 -	1,30 g/cm³
	Hardener 300:	1,20 -	1,24 g/cm³
<u>Colour:</u>	Casting Resin PU951:	black or as requested	
	Hardener 300:	dark brown	
<u>Potlife (250g):</u>	40 - 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>	14 days	at room temperature	

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

Physical Properties:

<u>Shore-Hardness A:</u>	70 - 75	ISO 868, DIN 53505
<u>Tensile strength:</u>		ISO 527-2
<u>Elongation at break:</u>		ISO 527-2
<u>Modulus of elasticity:</u>		ISO 527-2
<u>Thermal conductivity:</u>	0,3 W/m·K	ISO 8894
<u>Glass transition temperature:</u>	-28 °C	TMA
<u>Coefficient of Expansion:</u>	62 ppm/K 210 ppm/K	< -30°C, TMA > -25°C, TMA
<u>Thermal class:</u>	E	IEC 60085
<u>Shrinkage after curing:</u>	0,5 %	
<u>Water absorption:</u>	1,4 %	after 30 days immersion
<u>Flammability classification:</u>	HB	UL94

Electrical Properties:

<u>Dielectric strength:</u>	20 kV/mm	IEC 60243-1 VDE 0303, TI.2
<u>Volume resistance:</u> 23°C/50% r.h.	$10^{13} \Omega \cdot \text{cm}$	IEC 60093 VDE 0303, TI.30
<u>Surface resistance:</u> 23°C/50% r.h.	$10^{15} \Omega$	IEC 60093 VDE 0303, TI.30
<u>Dielectric constant ϵ:</u> at 50 Hz, 23°C bei 1 kHz, 23°C bei 1 MHz, 23°C	5,3 4,9 5,4	IEC 60250 VDE 0303, TI.4
<u>Dissipation factor $\tan \delta$:</u> at 50 Hz, 23°C bei 1 kHz, 23°C bei 1 MHz, 23°C	0,018 0,012 0,03	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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