

WEVO-Casting Resin PU 7210 FL

Two-component encapsulating system based on polyurethane.

The resin component contains a mineral filler providing the material with self-extinguish properties. The resin contains no halogenated flame-retardants. The system is tested by Underwriters Laboratories under the File-No. E108835 at a thickness of 6 mm according to UL94V-0. HWI, HAI and CTI-tests are passed with PLC 0. The cured polymer exhibits tough properties. The product processes a high thermal distortion temperature.

Temperature range of use: -40°C to +145°C .

The product can be used up to temperatures of 150°C on a short term basis.

The casting resin is used with **WEVO-Hardener 507**

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

Product Specification:

<u>Mixing ratio:</u>	by weight: 100 parts Casting Resin PU 7210 FL 43 parts Hardener 507		
<u>Viscosity (22°C):</u>	Casting Resin PU7210FL:	7.000 -	8.500 mPa·s
	Hardener 507:	15 -	40 mPa·s
	Mixture:	400 -	600 mPa·s
<u>Density (22°C):</u>	Casting Resin PU7210FL:	1,53 -	1,57 g/cm³
	Hardener 507:	1,20 -	1,24 g/cm³
<u>Colour:</u>	Casting Resin PU7210FL:	black or as requested	
	Hardener 507:	brown	
<u>Potlife (300g):</u>	20 - 35 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>	85 - 90	ISO 868, DIN 53505
<u>Tensile strength:</u>	60 N/mm ²	ISO 527-2
<u>Elongation at break:</u>	10 %	ISO 527-2
<u>Modulus of elasticity:</u>		ISO 527-2
<u>Thermal conductivity:</u>	0,65 W/m·K	ISO 8894
<u>Glass transition temperature:</u>	115 °C	TMA
<u>Coefficient of Expansion:</u>	58 ppm/K 151 ppm/K	< 110°C, TMA > 120°C, TMA
<u>Thermal class:</u>	B	IEC 60085
<u>Shrinkage after curing:</u>		
<u>Water absorption:</u>	0,3 %	after 30 days immersion
<u>Flammability classification:</u>	V-0, 6 mm	UL94
<u>Glow wire flammability:</u>	6mm, 960°C / 825°	IEC 60695-2-12/-13 GWFI/GWIT

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 ¹⁴ Ω·cm	IEC 60093 VDE 0303, TI.30
<u>Surface resistance:</u> 23°C/50% r.h.	10 ¹⁵ Ω	IEC 60093 VDE 0303, TI.30
<u>Dielectric constant ε:</u> at 50 Hz, 23°C	4,1	IEC 60250 VDE 0303, TI.4
<u>Dissipation factor tan δ :</u> at 50 Hz, 23°C	0,09	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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