

## Technical Datasheet

### WEVOPUR 390

Two-component encapsulating system based on polyurethane.

The resin component is formulated with a mineralfiller which provides self-extinguishing properties.

The material achieves UL 94 V-2 properties at a thickness of 1,5 mm and is approved and listed under the File No. E108835 in colours black, grey and brown.

The resin contains no halogenated flame-retardants, no heavy metals or chlorofluorocarbons.

Temperature range of use: -40°C to +130°C .

The casting resin is used with WEVONAT 300 M

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

#### Product Specification:

<u>Mixing ratio:</u>	100	parts by weight	WEVOPUR 390	
	30	parts by weight	WEVONAT 300 M	
<u>Viscosity (22°C):</u>	WEVOPUR 390:	1.600	– 2.400	mPa·s
	WEVONAT 300 M:	100	– 170	mPa·s
	Mixture:	900	– 1.200	mPa·s
<u>Density (22°C):</u>	WEVOPUR 390:	1,28	– 1,31	g/cm <sup>3</sup>
	WEVONAT 300 M:	1,20	– 1,24	g/cm <sup>3</sup>
<u>Colour::</u>	WEVOPUR 390:	black or as requested		
	WEVONAT 300 M:	dark brown		
<u>Pot life (250 g):</u>	35 – 50	minutes	at room temperature	
<u>Curing time:</u>	12 – 24	hours	at room temperature	

The curing time depends on the temperature, the pot life, the thickness of the layer and the casting volume

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

**Physical Properties:**

(after curing 24 h/80°C)

<u>Shore-hardness D:</u>	35 – 45
<u>Tensile strength:</u>	7 N/mm <sup>2</sup>
<u>Elongation at break:</u>	88 %
<u>Modulus of elasticity:</u>	15 N/mm <sup>2</sup>
<u>Thermal conductivity:</u>	0,4 W/m·K
<u>Glass transition temperature:</u>	7 °C
<u>Coefficient of Expansion:</u>	80 ppm/K 190 ppm/K
<u>Thermal class:</u>	B
<u>Shrinkage after curing:</u>	-
<u>Water absorption:</u>	0,3 %
<u>Flammability:</u>	V-2, 1,5 mm
<u>Glow wire flammability:</u>	960°C, 5,8-6,8 mm

**Electrical Properties:**

<u>Dielectric strength:</u>	32 kV/mm
<u>Volume resistance:</u> 23°C/50% r.h.	6,7 · 10 <sup>14</sup> Ω·cm
<u>Surface resistance:</u> 23°C/50% r.h.	1,1 · 10 <sup>16</sup> Ω
<u>Dielectric constant ε:</u> at 50 Hz, 23°C	5,5
at 1 KHz, 23°C	4,4
at 1 MHz, 23°C	3,6
<u>Dissipation factor tan δ:</u> at 50 Hz, 23°C	0,14
at 1 KHz, 23°C	0,09
at 1 MHz, 23°C	0,03
<u>Comparative tracking index:</u>	CTI 600

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 after production.

**Test specification:**

In accordance with ISO 7619-1 (Pressing time 3 sec.)
ISO 527-2
ISO 527-2
ISO 527-2
DIN 22007-2/2008
TMA
< -10°C, TMA > +5°C, TMA
DIN EN 60085
after 30 days immersion
UL94
DIN EN 60695-2-11:2014-11

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RoHS conform

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