

## Technical Datasheet

### WEVOPUR 552 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 and is tough elastic.

The system is tested by Underwriters Laboratories under the File-No. E108835 at a thickness of 1,5 mm according to UL 94 V-0. HWI, HAI and CTI-tests are passed with PLC 0, the RTI value is 130°C (mechanical and electrical strength). This product has the all colour recognition.

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

The casting resin is used with WEVONAT 300 M

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

#### Product Specification:

<u>Mixing ratio:</u>	100	parts by weight	WEVOPUR 552 FL	
	20	parts by weight	WEVONAT 300 M	
<u>Viscosity (22°C):</u>	WEVOPUR 552 FL :	6.000	– 7.000	mPa·s
	WEVONAT 300 M :	100	– 170	mPa·s
	Mixture:	1.200	– 1.600	mPa·s
<u>Density (22°C):</u>	WEVOPUR 552 FL :	1,55	– 1,60	g/cm <sup>3</sup>
	WEVONAT 300 M :	1,20	– 1,24	g/cm <sup>3</sup>
<u>Colour::</u>	WEVOPUR 552 FL :	black or as requested		
	WEVONAT 300 M :	dark brown		
<u>Pot life (250g):</u>	30 – 50 minutes		at room temperature	
	The curing time depends on the temperature, the pot life, the thickness of the layer and the casting volume			
<u>Curing time:</u>	12 – 24 hours		at room temperature	

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

### **Physical Properties:**

(after curing 24 h./80°C)

<u>Shore-hardness D:</u>	60 – 70
<u>Tensile strength:</u>	6 N/mm <sup>2</sup>
<u>Elongation at break:</u>	62 %
<u>Modulus of elasticity:</u>	55 N/mm <sup>2</sup>
<u>Thermal conductivity:</u>	0,61 W/m·K
<u>Glass transition temperature:</u>	15°C
<u>Coefficient of Expansion:</u>	58 ppm/K 142 ppm/K
<u>Thermal class:</u>	B
<u>Shrinkage after curing:</u>	1 %
<u>Water absorption:</u>	0,4 %
<u>Flammability:</u>	V-0, 1,5 mm
<u>Glow wire flammability:</u>	-

### **Electrical Properties:**

<u>Dielectric strength:</u>	29 kV/mm
<u>Volume resistance:</u> 23°C/50% r.h.	10 <sup>13</sup> Ω·cm
<u>Surface resistance:</u> 23°C/50% r.h.	10 <sup>16</sup> Ω
<u>Dielectric constant ε:</u> at 50 Hz, 23°C at 1 kHz, 23°C at 1 MHz, 23°C	5,6 4,6 3,7
<u>Dissipation factor tan δ:</u> at 50 Hz, 23°C at 1 kHz, 23°C at 1 MHz, 23°C	0,117 0,084 0,038
<u>Comparative tracking index:</u>	CTI 600-0.1

### **Test specification:**

In accordance with ISO 7619-1 (Pressing time 3 sec.)
ISO 527-2
ISO 527-2
ISO 527-2
ISO 22007-2:2008
TMA
< 10°C, TMA > 20°C, TMA
DIN EN 60085
after 30 days immersion
UL94
DIN EN 60695-2-11:2014-11

Packaging: 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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RoHS conform

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version 03/18 replaces version 01/12