



WEVO-Casting Resin PU 552 FL

Solventless casting resin system based on polyurethane, consisting of resin and hardener. The resin component contains the non-abrasive filler and is degased.

The polymerized system is elastic with self-extinguish properties and is tested by Underwriters Laboratories under the File-No. E108835 at a thickness of 1,5 mm according to UL94V-0.

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

Temperature range of use: -25°C to 130°C. In various applications this resin was successfully used up to -40°C.

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

A casting resin for electrical application e.g. for power or instruments transformers, capacitors and electronic components.

Product specification:

<u>Mixing ratio:</u>	by weight:	100 parts PU 552 FL 20 parts Hardener 300
<u>Viscosity (22°C):</u>	PU 552 FL:	6.000 – 7.000 mPa·s
	Hardener 300:	70 - 120 mPa·s
	Mixture:	1.000 – 1.300 mPa·s
<u>Density (22°C):</u>	PU 552 FL:	1,56 – 1,60 g/cm ³
	Hardener 300:	1,20 – 1,24 g/cm ³
<u>Colour:</u>	PU 552 FL:	black or as requested
	Hardener 300:	brown
<u>Pot-life:</u>	35 minutes	at room-temperature
<u>Curing time</u>	ca. 10 hours	

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

Final hardness: 7 – 10 days at room-temperature

It is possible to accelerate the pot-life and curing time as requested.



Cured Properties:

<u>Shore-D-Hardness:</u>	60	ISO 868, DIN 53505
<u>Tensile strength:</u>	17 N/mm ²	DIN 53455
<u>Elongation at break:</u>	9 %	DIN 53455
<u>Thermal conductivity:</u>	0.58 W/m·K	DIN VDE 0304, TI.1
<u>Glass transition temperature:</u>	65°C	DSC
<u>Thermal Index:</u>	132°C	IEC 216
<u>Thermal class:</u>	B	IEC 85
<u>Shrinkage after curing:</u>		
<u>Water absorption:</u>	0.16 %	DIN 53472
<u>Flammability classification:</u>	V-0 at a thickness of 1.5 mm	UL 94

Test specifications

Electrical Properties:

<u>Dielectric strength:</u>	27 kV/mm	IEC 243 DIN VDE 0303, TI.3
<u>Surface resistance:</u> 23°C/50% r.H.	$1.3 \cdot 10^{13} \Omega$	IEC 93 DIN VDE 0303, TI.3
<u>Volume resistivity:</u> 23°C/50% r.H.	$1.3 \cdot 10^{14} \Omega \cdot \text{cm}$	IEC 93 DIN VDE 0303, TI.3
<u>Dielectric constant ϵ:</u> at 50 Hz, 23°C 1 kHz, 23°C 1 Mhz, 23°C	5.34 5.18 4.87	IEC 250 DIN VDE 0303, TI.4
<u>Dissipation factor $\tan \delta$:</u> at 50 Hz, 23°C 1 kHz, 23°C 1 Mhz, 23°C	0.051 0.042 0.034	IEC 250 DIN VDE 0303, TI.4
<u>Comparative tracking index:</u>	CTI 600 - 0.1 CTI 600 M-0.1	IEC 112 DIN VDE 0303, TI.1

Packing: 750 ml, 5 kg, 10 kg und 30 kg-bucket, 200 kg drums

Shelf life: in original closed cans or drums, at a dry storage between 18°C and 25°C, 6 months.

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PU 552FL/Ha300
Version 01/03 replaces 07/02

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