WE CAST
WE BOND
WE SEAL

Technical Datasheet

WEVOPUR 403 FL

Two-component encapsulating system based on polyurethane.
The polymerized system has self-extinguish properties and is tested by Underwriters Labotatories 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, RTI value is 155°C (electrical strength). This product has the all colour recognition. The resin contains no halogenated flame-retardants, no heavy metals or chlorofluorocarbons.

After curing the resin has an excellent flexibility at low temperatures and thermal endurance as well as an outstanding behavior in thermal shock tests.

Temperature range of use: -50°C to +165°C.

The casting resin is used with WEVONAT 300 M

Applications: Encapsulation of applications that require high thermal resistance and endurance, like coils, sensors or PCBs. Especially for automotive or ex-proof applications.

Product Specification:

Mixing ratio:	100	parts by weight	WEVOPUR 403 FL		
	14	parts by weight	WEVONAT 300 M		
Viscosity (22°C):	WEVOPUR 403 FL:		12.000	– 18.000	mPa·s
	WEVONAT 300 M:		100	– 170	mPa·s
	Mixture:		2.800	– 4.000	mPa·s
Density (22°C):	WEVOPUR 403 FL:		1,62	– 1,65	g/cm³
	WEVONAT 300 M:		1,20	– 1,24	g/cm³
Colour::	WEVOPUR 403 FL:		black or as requested		
	WEVONAT 300 M:		dark brown		
Pot life (100g):	ca. 40 minutes		at room temperature		
Curing time:	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.

WEVO-CHEMIE GmbH

Postfach 3108 · D-73751 Ostfildern-Kemnat · Schönbergstraße 14 · D-73760 Ostfildern-Kemnat
Telefon +49 (0)711 167 61-500 · Fax +49 (0)711 167 61-544 · info@wevo-chemie.de · www.wevo-chemie.de
Sitz: Ostfildern-Kemnat · Amtsgericht Stuttgart HRB 213899 · Ust-IdNr.: DE812988009
Geschäftsführer: Peter Barwitzki

Physical Properties: (after curing 24 h/80°C)		Test specification:
Shore-hardness D:	55 – 60	In accordance with ISO 7619-1 (Pressing time 3 sec.)
Tensile strength:	9 N/mm²	ISO 527-2
Elongation at break:	40 %	ISO 527-2
Modulus of elasticity:	110 N/mm²	ISO 527-2
Thermal conductivity:	0,75 W/m·K	DIN 22007-2/2008
Glass transition temperature:	-6 °C	TMA
Coefficient of Expansion:	42 ppm/K 146 ppm/K	< -10°C, TMA > +5°C, TMA
Thermal class:	F	DIN EN 60085
Shrinkage after curing:	1,6 %	
Water absorption:	0,6 %	after 30 days immersion
Flammability:	V-0, 1,6 mm	UL94
Electrical Properties:		
Dielectric strength:	30 kV/mm	DIN EN 60243
Volume resistance: 23°C/50% r.h.	$1{,}9 \cdot 10^{14}$ Ω·cm	DIN EN 62631-3-1:2016
Surface resistance: 23°C/50% r.h.	$2{,}8 \cdot 10^{15}$Ω	DIN EN 62631-3-2:2016
Dielectric constant ε: at 50 Hz, 23°C at 1 KHz, 23°C at 1 MHz, 23°C	 5,7 5,3 4,7	DIN EN 60250
Dissipation factor tan δ : at 50 Hz, 23°C at 1 KHz, 23°C at 1 MHz, 23°C	 0,04 0,04 0,03	DIN EN 60250
Comparative tracking index:	CTI 600	DIN EN 60112

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.

RoHS conform

pur403fl_nat300m_engl
version 10/18 replaces version 01/12