PUre Thermal Conductivity FR 30/30

- **2-components polyurethane casting resin**
- **solvent-free system and electrically insulating**
- **excellent thermal conductivity**
- **no metallic fillers**
- **no halogenated flame-retardants**
- **excellent adhesive properties**
- **ideal for heat-reduction of winding goods, electric motors, accumulators, and high-performance components**
- **TIP: Design variations of effective cooling elements, good combination with Kisling's LED-casting resins**

✓ The casting resin is used with **PUre Hardener 1073**

✓ Product name explanations:

PUre Thermal Conductivity	= product line
FR 30	= product name
/30	= potlife configuration in min

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Product specification:

Operating temperature:	-40°C up to +130°C	
Flammability classification:	V-0 in 4,0mm	
Mixing ratio:	100 parts PUre Thermal Conductivity FR 30/30 7 parts PUre Hardener 1073	
Viscosity (22°C): (At 10 rpm)	resin: PUre Thermal Conductivity FR 30/30 hardener: PUre Hardener 1073 mixing viscosity	100.000 - 140.000 mPa*s 15 - 35 mPa*s 60.000 - 100.000 mPa*s
Density (22°C):	resin: PUre Thermal Conductivity FR 30/30 hardener: PUre Hardener 1073	2,00 - 2,20 g/cm³ 1,20 - 1,25 g/cm³
Colour:	Nature, or as required	
Potlife	10 - 30 minutes The curing time depends on thickness of the layer, the casting volume and the temperature	
Curing time (22°C):	16 - 30 hours	
Final hardness	10 - 14 days	

Physical properties:

Shore-Hardness:	D 20 - 30	ISO 868, DIN 53505
Thermal conductivity:	3,5 W/m*K	DIN EN ISO 22007
Glass transition temperature:	-8,4 °C	TMA
Coefficient of expansion:	131,5 ppm/K 157,4 ppm/K	< Tg, TMA > Tg, TMA
Shrinkage after curing:	<1 %	
Water absorption:	0,4 % (30 days at 23°C)	
Insulation class:	B	IEC 60085

Electrical Properties:

Dielectrical strength:	28 kV/mm	IEC 60243-1, VDE 0303, Tl.2
Volume resistance:	10^{15} Ω*cm (23°C/ 50% r.F.)	IEC 60243-1, VDE0303, Tl.30
Surface resistance:	10^{16} Ω (23°C/ 50% r.F.)	IEC 60243-1, VDE0303, Tl.30
Dielectric constant (ε_r): at 50 Hz, 23 °C at 1 KHz, 23 °C at 1 MHz, 23 °C	 5,5 4,5 3,9	 IEC 60250, VDE 0303, Tl.4
Dieletric dissipation factor: (tan δ) at 50 Hz, 23 °C	 0,09	 IEC 60250, VDE 0303, Tl.4
Coparative Tracking Index:	CTI 600	IEC 60112, VDE 0303, Tl.1

Shelf life:	6 months in sealed original containers when stored in dry conditions (15°C to 25°C).
Packaging:	Resin and hardener are offered in separate packaging units.
RoHS:	We hereby certify that all our products are unexceptional RoHS conform, according to the EU directive 2011/65/EG (RoHS2) and the amendment of Directive 2015/863.

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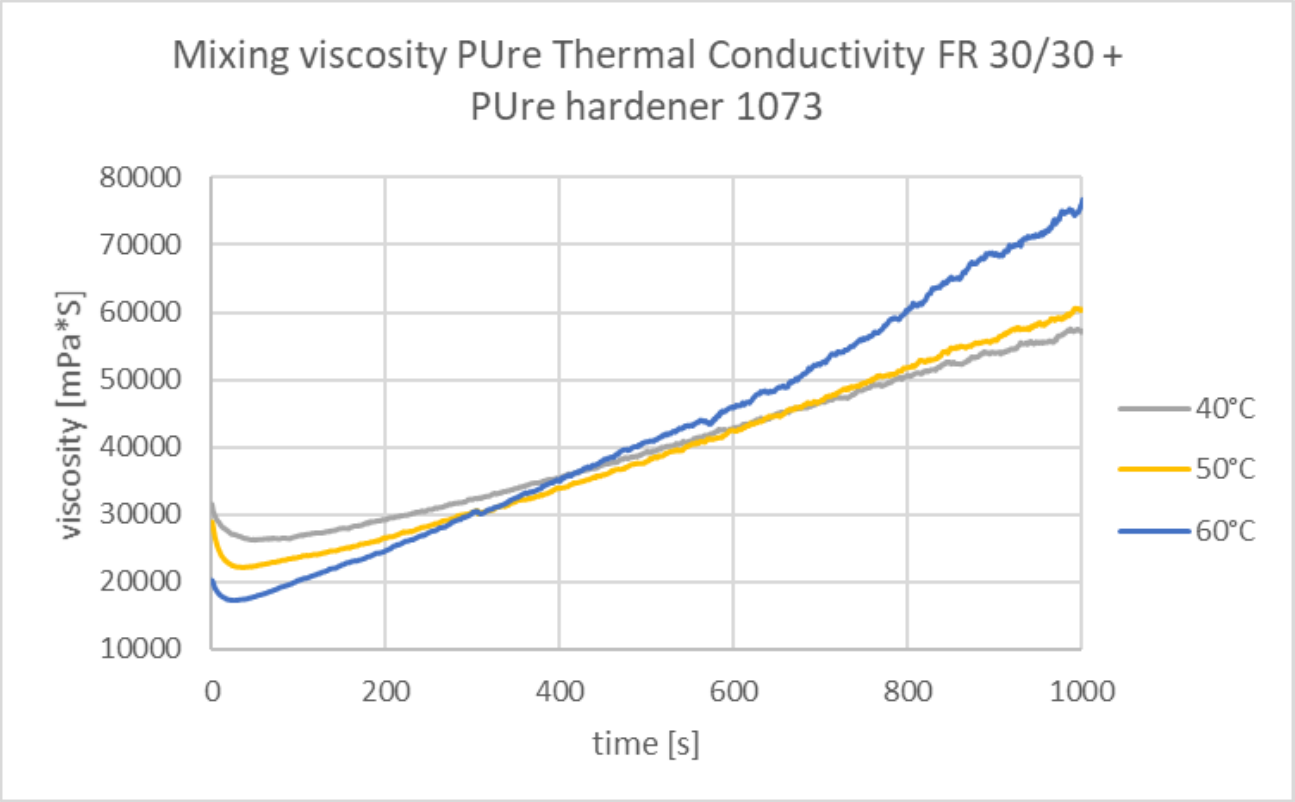
Viscosity curve:



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