

PUre Thermal Conductivity GF 93

- 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

- ✓ The casting resin is used with **PUre Hardener G4093**
- ✓ Product name explanations:
 PUre Thermal Conductivity = product line
 GF 93 = product name

Product specification:

Operating temperature:	-40°C up to +130°C	
Flammability classification:	V-0 in 4,0mm	
Mixing ratio:	100 volume parts PUre Thermal Conductivity GF 93 100 volume parts PUre Hardener G4093	
Viscosity (22°C): (At 10 rpm)	resin: PUre Thermal Conductivity GF 93 hardener: PUre Hardener G4093 mixing viscosity	70.000 - 90.000 mPa*s 80.000 - 100.000 mPa*s 70.000 - 100.000 mPa*s
Density (22°C):	resin: PUre Thermal Conductivity GF 93 hardener: PUre Hardener G4903	2,20 - 2,30 g/cm ³ 2,20 - 2,30 g/cm ³
Colour:	nature	
Curing time (22°C):	24 - 48 hours	
Final hardness	10 - 14 days	

Physical properties:

Shore-Hardness:	A 60 - 70	ISO 868, DIN 53505
Thermal conductivity:	3,0 W/m*K	DIN EN ISO 22007
Glass transition temperature:	-65,7 °C	TMA
Coefficient of expansion:	47,2 ppm/K	< Tg, TMA
	158,3 ppm/K	> Tg, TMA
Shrinkage after curing:	<1 %	
Water absorption:	0,4 % (30 days at 23°C)	
Insulation class:	B	IEC 60085

Electrical Properties:

Dielectrical strength:	IEC 60243-1, VDE 0303, TI.2
Volume resistance:	IEC 60243-1, VDE0303, TI.30
Surface resistance:	IEC 60243-1, VDE0303, TI.30
Dielectric constant (ϵ_r):	
at 50 Hz, 23 °C	IEC 60250,
at 1 KHz, 23 °C	VDE 0303, TI.4
at 1 MHz, 23 °C	
Dielectric dissipation factor:	
(tan δ)	IEC 60250,
at 50 Hz, 23 °C	VDE 0303, TI.4
Comparative Tracking Index:	IEC 60112, VDE 0303, TI.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.