

PUre Flame Resistance GF 91

- 2-components polyurethane casting resin
- solvent-free and silicon-free system
- hard curing degree
- no halogenated flame-retardants
- self-extinguishing properties
- high thermal conductivity
- electrically insulating
- excellent adhesive properties
- ideal for electronic components, e.g. sensors, lithium-ion batteries and transformers

- ✓ The casting resin is used with **PUre Hardener G4091**
- ✓ Product name explanations:
PUre Flame Resistance = product line
GF 91 = product name

Product specification:

Operating temperature:	-40°C up to +130°C	
Flammability classification:	V-0 in 4 mm	
Mixing ratio:	100 parts PUre Flame Resistance GF 91 100 parts PUre Hardener G4091	
Viscosity (22°C):	resin: PUre Flame Resistance GF 91	55.000 - 70.000 mPa*s
	hardener: PUre Hardener G4091	80.000 - 95.000 mPa*s
	mixing viscosity	65.000 - 85.000 mPa*s
Density (22°C):	resin: PUre Flame Resistance GF 91	2,55 - 2,65 g/cm ³
	hardener: PUre Hardener G4091	2,55 - 2,65 g/cm ³
Colour:	nature	
Curing time (22°C):	24 - 48 hours	
Final hardness	10 - 14 days	

Physical properties:

Shore-Hardness:	> A 30	ISO 868, DIN 53505
Thermal conductivity:	1,0 W/m*K	DIN EN ISO 22007
Glass transition temperature:		TMA
Coefficient of expansion:		< Tg, TMA > Tg, TMA
Shrinkage after curing:	<1 %	
Water absorption:	0,4 % (30 days at 23°C)	
Insulation class:	F	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 at 1 KHz, 23 °C at 1 MHz, 23 °C	IEC 60250, VDE 0303, TI.4
Dielectric dissipation factor: ($\tan \delta$) at 50 Hz, 23 °C	IEC 60250, 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.