

Thermal Conductivity

Resin 8501/30N (ex TC52) + Hardener 8930 (ex H3000)

- 2-components polyurethane casting resin
- semi-hard curing degree
- self-extinguishing properties
- high thermal conductivity of 1 W/(m·K)
- electrically insulating
- CMR free *
- solvent-free system
- no halogenated flame-retardants
- excellent adhesive properties
- available in cartridges
- ideal for electronic components, e.g. sensors, lithium-ion batteries and transformers

* not subject to CMR labelling according to section 2 of the safety data sheet

Product specification:

Mixing ratio:	Resin 8501/30N	100 parts
	Hardener 8930	8 parts
Viscosity (22°C): (at 10 rpm)	Resin 8501/30N	12'000 – 15'000 mPa·s
	Hardener 8930	450 – 750 mPa·s
	Mixing viscosity	5'500 – 6'500 mPa·s
Density (22°C):	Resin 8501/30N	1.50 – 1.60 g/cm ³
	Hardener 8930	1.10 – 1.15 g/cm ³
Colour:	Nature (beige)	
Pot life:	25 – 35 minutes	
Curing time (22°C):	16 – 30 hours	
Final hardness	10 – 14 days	

Physical properties:

Shore-Hardness:	A 55 – 65	ISO 868, DIN 53505
Thermal conductivity:	~ 1.0 W/(m·K)	DIN EN ISO 22007
Glass transition temperature:	~ -5 °C	TMA
Shrinkage after curing:	<1 %	
Water absorption:	~ 0.2 % (30 days at 23°C)	
Operating temperature:	-40°C up to +130°C	
Flammability classification:	V-0 in 4.0 mm	

Electrical properties:

Dielectric strength:	24 kV/mm	IEC 60243-1, VDE 0303, TI.2
Volume resistance:	10 ¹⁵ Ω·cm (23°C/ 50% r.F.)	IEC 60243-1, VDE0303, TI.30
Surface resistance:	10 ¹⁵ Ω (23°C/ 50% r.F.)	IEC 60243-1, VDE0303, TI.30
Dielectric constant (ε _r):		
at 50 Hz, 23 °C	5.2	IEC 60250,
at 1 KHz, 23 °C	4.6	VDE 0303, TI.4
at 1 MHz, 23 °C	4.3	
Dielectric dissipation factor: (tan δ)		IEC 60250,
at 50 Hz, 23 °C	0.12	VDE 0303, TI.4
Comparative Tracking Index:	CTI 600	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.

TDS_8501_30N+8930/PC/26.06.2023