

Insulation / Flame Resistance

Resin 8605/30N (ex ST 51) + Hardener 8973 (ex 1073)

- 2-components polyurethane casting resin
- Solvent-free system
- Semi-hard curing degree
- No halogenated flame-retardants
- Self-extinguishing properties
- High thermal conductivity
- Electrically insulating
- Excellent adhesive and shock-resistant properties
- Ideal for electronic components, e.g. sensors, lithium-ion batteries and transformers

Product specification:

Mixing ratio (weight):	Resin 8605/30N	100 parts
	Hardener 8973	15 parts
Viscosity (22°C):	Resin 8605/30N	2'800 – 3'800 mPa·s
	Hardener 8973	15 – 35 mPa·s
	Mixing viscosity	900 – 1'300 mPa·s
Density (22°C):	Resin 8605/30N	1.48 – 1.53 g/cm³
	Hardener 8973	1.20 – 1.25 g/cm³
Colour:	Nature (beige)	
Pot life:	25 – 35 minutes	
	The curing time depends on the 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:	A 65 – 75	ISO 868, DIN 53505
Thermal conductivity:	0.5 W/(m·K)	DIN EN ISO 22007
Glass transition temperature:	-29.4°C	TMA
Coefficient of expansion:	96.9 ppm/K	< T _g , TMA
	188.9 ppm/K	> T _g , TMA
Shrinkage after curing:	<1 %	
Water absorption:	0.3 % (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:	25 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 ¹⁶ Ω (23°C/ 50% r.F.)	IEC 60243-1, VDE0303, TI.30
Dielectric constant (ε _r):		
at 50 Hz, 23 °C	5.3	IEC 60250,
at 1 KHz, 23 °C	4.8	VDE 0303, TI.4
at 1 MHz, 23 °C	4.7	
Dielectric dissipation factor:		
(tan δ)		IEC 60250,
at 50 Hz, 23 °C	0.08	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.

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