

## Insulation / Flame protection

### Resin 8601/30S (ex TG 68) + Hardener 8973 (ex 1073)

- 2-components polyurethane casting resin
- solvent-free system
- soft curing degree
- no halogenated flame-retardants
- highly electrically insulating
- excellent adhesive properties
- wide operating temperature range
- suitable for low temperatures applications
- ideal for electronic components, e.g., coils, sensors, PCBs or capacitors

#### Product specification:

Mixing ratio (weight):	Resin 8601/30S Hardener 8973	100 parts 20 parts
Viscosity (22°C): (at 10 rpm)	Resin 8601/30S Hardener 8973 Mixing viscosity	3'500 – 4'000 mPa·s 15 – 35 mPa·s 1'800 – 2'400 mPa·s
Density (22°C):	Resin 8601/30S Hardener 8973	0.90 - 0.95 g/cm <sup>3</sup> 1.20 - 1.25 g/cm <sup>3</sup>
Colour:	Black	
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 25 – 35	ISO 868, DIN 53505
Thermal conductivity:	0.3 W/(m·K)	DIN EN ISO 22007
Glass transition temperature:	-69.1 °C	TMA
Coefficient of expansion:	101.4 ppm/K 222.4 ppm/K	< T <sub>g</sub> , TMA > T <sub>g</sub> , TMA
Shrinkage after curing:	<1 %	
Water absorption:	0.2 % (30 days at 23°C)	
Operating temperature:	-80 °C up to +130 °C	
Flammability classification:	HB	

**Electrical properties:**

Dielectric strength:	25 kV/mm	IEC 60243-1, VDE 0303, TI.2
Volume resistance:	10 <sup>14</sup> Ω·cm (23°C/ 50% r.F.)	IEC 60243-1, VDE0303, TI.30
Surface resistance:	10 <sup>16</sup> Ω (23°C/ 50% r.F.)	IEC 60243-1, VDE0303, TI.30
Dielectric constant (ε <sub>r</sub> ):		
at 50 Hz, 23 °C	3.2	IEC 60250,
at 1 KHz, 23 °C	3.0	VDE 0303, TI.4
at 1 MHz, 23 °C	2.7	
Dissipation factor: (tan δ)		IEC 60250,
at 50 Hz, 23 °C	0.02	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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