BONDING + SEALING + ENCAPSULATION



Insulation / Flame protection

Resin 8612/20 (ex ST13) + Hardener 8901 (ex H1001)

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

Product specification:

Mixing ratio (weight):	Resin 8612	100 parts	
	Hardener 8901	20 parts	
Viscosity (22°C):	Resin 8612	3'500 − 4'500 mPa·s	
	Hardener 8901	160 − 240 mPa·s	
	Mixing viscosity	1'200 – 1'800 mPa·s	
Density (22°C):	Resin 8612	1.60 – 1.65 g/cm³	
	Hardener 8901	1.20 – 1.25 g/cm³	
Colour:	Nature (beige)		
Pot life:	15 – 25 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		

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Physical properties:

Shore-Hardness:	D 50 – 60	ISO 868, DIN 53505
Thermal conductivity:	0.6 W/(m·K)	DIN EN ISO 22007
Glass transition temperature:	12.0°C	ТМА
Coefficient of expansion:	63.9 ppm/К 155.8 ppm/К	< Tg, TMA > Tg, TMA
Shrinkage after curing:	<1 %	
Water absorption:	0.3 % (30 days at 23°C)	
Insulation class:	В	IEC 60085
E-Moduls:	231 MPa	DIN EN ISO 527-2
Tensile strength:	14.2 N/mm ²	
Elongation at break:	19 %	
Operating temperature:	-40°C up to +130°C	
Flammability classification:	V-0 in 1.5 mm	

Electrical properties:

Dielectrical strength:	30 kV/mm	IEC 60243-1, VDE 0303, TI.2
Volume resistance:	10 ¹⁴ 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	4.9	VDE 0303, TI.4
at 1 MHz, 23 °C	4.1	
Dieletric dissipation factor:		IEC 60250,
(tan δ)		
at 50 Hz, 23 °C	0.08	VDE 0303, TI.4
Coparative Tracking Index:	CTI 600	IEC 60112, VDE 0303, TI.1

Our technical advice, whether verbal, in writing or by way of trials - is given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us to their suitability for the intended processes and uses. The application, use and processing of the products are beyond our control and therefore, entirely your own responsibility. Should in spite of this, liability be established by us and used by you. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery.

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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.

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