Kisling

TECHNICAL DATASHEET

ergo.® 7360

(ergo.® 7358 resin + ergo.® 7359 hardener and ergo.® 7357 filler)

Description

Easy flowing 3-component epoxy resin for potting applications (e.g. connectors or sensors).
Passes UL94 V-0 in thicknesses > 5mm.

Advantages

- Low odour
- Slow curing
- Easy flowing; self-leveling
- Solvent free

Physical properties (liquid product)

Chemical base			filled epoxy resin	
Curing system			3K System	
Mixing ratio			100 : 171 : 22	
			(resin : hardener : filler by weight)	
Viscosity according to DIN EN ISO 3219				
(Cone/plate-system; cone C-50, shear rate D=100 s^{-1}; 25°C)				
	Filler	ergo.® 7357	n.a. (solid powder)	
	Resin	ergo.® 7358	450 – 700	mPa•s
	Hardener	ergo.® 7359	~ 5	mPa•s
	Mixture		2500 - 3000	mPa•s
Colour	Filler	ergo.® 7357	white	
	Resin	ergo.® 7358	colorless	
	Hardener	ergo.® 7359	colorless	
	Mixture		off-white	
Density	Filler	ergo.® 7357	2.4	g/cm³
@ 23°C	Resin	ergo.® 7358	1.0	g/cm³
	Hardener	ergo.® 7359	0.9	g/cm³
Pot life (100g mixture @ 25°C)			~60 Minutes	
Gel time			~270 Minutes	
Shelf life (in original sealed containers)			18 month at RT	

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Physical properties (cured product after 2 days/23 °C or 16 hours/40 °C)

Final strength	2 days at 23°C 16 hours at 40°C
Shore D hardness	~65
Density	~1.6 g/cm³
Glasstransitiontemperature (T_g)	~ 45 °C
Thermal range	- 40 °C to +100 °C
Decomposition temperature	> 200 °C
Thermal expansion coefficient (ISO11359)	~80 ppm•K^{-1}
Thermal conductivity (ASTM E 1461)	~ 0,72 W/(m•K)

Electrical properties

Breakdown voltage	43.0 [KV/mm]
Creep resistance CTI	> 600 [V]
Specific resistance (DIN IEC 60093)	> 1,5•10^{12} Ω•cm

Instruction of use

First mix the resin ergo.® 7358 and the filler ergo.® 7357 until it is homogeneous. Then add the hardener ergo.® 7359 and mix again. (Consider the parts by weight correctly: 100 : 171 : 22). If the absence of air/bubbles in the potting resin is crucial, perform degassing under reduced pressure for 10 minutes (50 – 100 mbar).
The viscosity of the mixture will start to raise with the addition of the hardener – the earlier processed the less viscous is the mixture. For potting use within 30 minutes.

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