

## Product Information

### Adhesive Systems

Surface Mount

Thermal cure

# Elan-Glue® EP 5350

Provisional

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## Product description

Elan-Glue® EP 5350 is a 1-component solvent free thixotropic formulation based on epoxy resins and fast thermal cure at low temperature to form a hard material suitable for a wide range of adhesive applications.

Elan-Glue® EP 5350 satisfies the requirements of ROHS.

## Areas of application

Elan-Glue® EP 5350 can be used in application such as glass/glass or glass/metal gluing. It gives excellent results for polar plastic like PMMA, PC, ABS, SA as well as combination of such plastics with glass or metal, too.

It has a high viscosity, thixotropic flow behaviour and excellent wettability to various substrates. The applied material will remain in place during curing.

The cured product is very hard, colourless and highly transparent. It shows an excellent stability against UV-radiation.

## Properties of the cured material

Rapid low temperature curing  
Good adhesion on many substrates  
Low shrinkage on curing  
Resistant to moisture and migration  
Resistant to organic and inorganic solvents  
Solvent Free

## Storage

Elan-Glue® EP 5350 is supplied in sealed packages; they can be stored for 3 month at ambient temperature.

## Processing suggestions

Elan-Glue® EP 5350 should be applied directly from the packages with a suitable application system. If Elan-Glue® EP 5350 is transferred to a second package or applicator it must be used in a short time as exposure to temperature will start the curing reaction.

The packages should be allowed to reach their application temperature, 25 to 30 °C, before use to allow the viscosity to reach the specified level.

Curing is typically carried between 80°C and 120°C.

To ensure satisfactory adhesion on the surfaces the following should be checked:

- Use of residue-free substrates
- ensure dry surfaces
- Check compatibility of the glue resin with the surfaces

**Table 1 - Properties of materials as supplied**

Property	Condition	Value	Unit
Colour		beige	
Viscosity; cone/plate	25°C	7.750 ± 1.750 (thixotropic)	mPa.s
Density DIN 53217	25°C	1,2	g/cm <sup>3</sup>
Shelf Life	20 °C	3	month

**Table 2 – Thermal Properties of cured compound**

Property	Condition	Value	Unit
Temperature Range		-40 to +150	°C

**Table 3 - Mechanical properties of cured compound (curing 1 h at 120°C)**

Property	Condition	Value	Unit
Density DIN 16945	25°C		g/cm <sup>3</sup>
Hardness DIN 53505	25°C	45 - 55	Shore D
Glass transition temperature		40 - 50	°C
Young(E)-Modulus below Tg (DMA)	Tg -20°C	600	MPa
Young(E)-Modulus above Tg (DMA)	Tg +20°C	3	MPa
Linear coefficient of expansion below Tg	Tg -20°C	80 x 10 <sup>-6</sup>	K <sup>-1</sup>
Linear coefficient of expansion above Tg	Tg +20°C	200 x 10 <sup>-6</sup>	K <sup>-1</sup>
Shear resistance on Aluminium (Twist-o-meter)	20°C		N/mm <sup>2</sup>

**Table 4 – Chemical Properties of cured compound**

Property	Condition	Value	Unit
Water Absorption DIN 53495	24h/25°C	< 1	%

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