Technical Data Sheet – **Preliminary Version**

ELAN-glue®

EP 5620

Electronic Epoxide – Thermal cure

Adhesive – Single Component

A member of ALTANA

Description

Elan-glue® EP 5620 is a solvent free one-component adhesive based on modified epoxy chemistry.
Elan-glue® EP 5620 cures by temperature.
Elan-glue® EP 5620 contains no volatile organic compounds (VOC-free), is lead-free and satisfies the requirements of the ROHS directive.

Key Properties:
- heat cure
- Temperature resistance -40 to +130°C
- Short Temperature resistance up to 160°C
- Good Adhesion
- VOC-free
- Low viscosity
- ROHS compliant

Area of application

Elan-glue® EP 5620 is a VOC-free adhesive with excellent adhesion to most surfaces. Proven in application are the following materials: fibre reinforced poly carbonate, stainless steel and aluminium. The material can be used as globe top material if applied in thin layer.

Processing methods

Elan-glue® EP 5620 has low viscosity to be suitable for automatic robot systems. Elan-glue® EP 5620 could be applied by commercial nozzles such as needle dispensing or jetting. Elan-glue® EP 5620 can also be applied manually by brushing.
Typical applied layers of ELAN-Glue® EP 5620 range from 50 µm to 200 µm.
Two different heating protocols are in use for ELAN-Glue® EP 5620

1) Heat curing @ 130°C for 8-18 min, the result is a high temperature melting cure suited to connect polymers.
2) Mild Cure @ 80°C for 30 – 60 min, the results is a transparent hard material

The components to be bonded should be clean dry and free from grease and compatibility between the resin and all materials should be checked prior to use.

Re-work

As a product based on expoxide chemistry ELAN-Glue® EP 5620 can only be removed mechanically in cured state.

Storage and stability

Elan-glue® EP 5620 can be stored in closed original containers storage for 6 months at maximum 5°C.

Handling precautions

The product is compliant with RoHS. Refer to the safety data sheet and comply with local regulations relating to industrial health and waste disposal.

Packaging

The material is available in pails of 5 kg, 10 kg and cartrdiges of 50 g as a standard. Other packaging volumes on request.

SYSTEM SPECIFICATIONS

Property	Conditions	Method	Elan-glue® EP 5620	Units
Viscosity	23°C	DIN 53019 $D=100s^{-1}$	400 ± 250	mPa • s
Viscosity	23°C	(DIN 53019) $D=3s^{-1}$	800 ± 300	mPa • s

TYPICAL PRODUCTS CHARACTERISTICS

Property	Elan-glue® EP 5620
Colour	Transparent
Spec. gravity 20°C [g/cm^3] (DIN EN ISO 2811-1)	1.1554
Shelf Life at 5°C or below	6 months

TYPICAL THERMAL PROPERTIES OF THE CURED PRODUCT

Test	Elan-glue® EP 5620
Glass transitions temperature (T_g), DSC	55 °C
Temperature Resistance (IEC 60216)	130 °C
CTE (T_g below 60°C, α_1, 10^{-6} K^{-1})	100
CTE (T_g above 60°C, α_2, 10^{-6} K^{-1})	210

Produktname
ELAN-Glue® EP 5620

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