

Product Information

Casting Compound

Elan-tron[®]

SK 6220 / SH 6900

100:2,5

Addition curing silicone, flexible, high maximum operation temperature,
medium viscosity, self extinguishing acc. UL 94-V0

Product Description

Elan-tron[®] SK 6220 with Cross-Linker Elan-tron[®] 6900 is a silicone based room temperature cross-linking system. The addition cross-linking releases no by-products.

The system meets the ROHS requirements.

Areas of Application

Elan-tron[®] SK 6220 is suited for potting of windings under high thermal loads, such as occur in lifting magnets. Mechanical removal is relatively easy for Elan-tron[®] SK 6220 after curing/cross-linking when repairs to lifting magnets are necessary.

Properties of the Insulating Material

- Addition cross-linking
- Room temperature curing
- High long-term thermal resistance (180 °C)
- Low temperature flexibility to – 40 °C
- Elastic casting material
- Good temperature cycling resistance
- Self-extinguishing to UL 94 Class V0
- Good chemical resistance
- Repairable

Processing Methods

Preparation of components: The components to be potted should be clean dry and free from grease. Compatibility between the resin and all materials of the component should be checked prior to use.

Preparation of Material: Elan-tron[®] SK 6220 contains filler materials which tend to settle and must be stirred in the original container to restore the homogeneous composition before processing.

Mixing: Elan-tron[®] SK 6220 and Vernetzer Elan-tron[®] SH 6900 should be mixed in the prescribed ratio. Care should be taken because air may be included during mixing. Brief application of vacuum can be used to remove air bubbles. Equipment must be kept clean and care is needed to avoid cross-contamination of components, which may cause hardening in the equipment after days or weeks of use.

Application: Elan-tron[®] SK 6220/Vernetzer Elan-tron[®] SH 6900 can be applied either manually or with suitable mixing and dosing equipment.

Curing conditions:

- at Room Temperature 4-5 h

All vessels pipes, stirrers and equipment used must be thoroughly cleaned because the catalyst in the SK 6200 may be poisoned by traces of sulphur compounds (from vulcanising rubber), amines (from epoxies or adhesives) or heavy metals. Contamination would seriously inhibit the cross-linking reaction.

Storage: Elan-tron[®] SK 6220 and Cross-linker Elan-tron[®] 6900 in original unopened containers can be stored for 6 months. The shelf of the material is shown on the on the label of the container

System Specifications

Property	Condition	Resin	Hardener	Units
Viscosity DIN 53019	25°C	4500 ± 500	50 ± 10	mPa.s
Density DIN EN ISO 2811-2	20°C	1.56 ± 0.05	1.12 ± 0.03	g/cm ³
Shelf Life	23°C	6	6	months

Typical System Characteristics

Property	Condition	Value	Units
Color resin		beige	
Color hardener		clear transparent	
Viscosity IO-10-50 resin	25°C	-/-	mPa.s (0,17/1,7 sec ⁻¹)
Viscosity IO-10-50 hardener	25°C	-/-	mPa.s (0,17/1,7 sec ⁻¹)
Mix Ratio by weight (resin : hardener)		100:2,5	Parts by weight
Mix Viscosity DIN 53019	25°C	4500	mPa.s
Process time (200gr mixture)	20°C	ca. 30	min

Typical Cured System Characteristic (Post cure before measurement 24h/23°C + 16h/80°C)

Property	Condition	Value	Units
Thermal Conductivity DIN 52613		0.32	W/m.K
Glass transition temperature IEC 61006		-	°C
Thermal index IEC 216 flexural strength	% weight loss	-	°C
Linear coefficient of expansion Beck Test M 56	above tg	200 x 10 ⁻⁶	K ⁻¹
Specific Gravity DIN 16945	20°C	1.50 ± 0.05	g/cm ³
Hardness ISO 868		70 ± 5	Shore A
Tensile Strength DIN 53455/457		-	MPa
Bending Strength		-	MPa
Volume resistivity IEC 60455 Part 2	23°C 50 % rh 23°C (7 d storage in water)	- -	Ω.cm Ω.cm
Dielectric Constant ε _r IEC 60250	23°C / 50 Hz 23°C / 1K Hz	- -	
Dielectric Strength IEC 60250	23°C 50% rh 23°C (7 d storage in water)	30 -	kV/mm kV/mm
Dissipation factor tan-δ IEC 60250	50Hz, 23°C, 50% rh 1 KHz 23°C, 50% rh 1MHz, 23°C, 50% rh	- - -	
Dissipation factor tan-δ IEC 60250 7 days storage in water	50Hz, 23°C, 50% rh 1 KHz 23°C, 50% rh 1MHz, 23°C, 50% rh	- - -	
Tracking resistance IEC 60112		600	CTI
Water absorption ISO 62	24h RT	-	%

Sales office North :

ELANTAS UK Ltd
Keate House
1 Scholar Green Road
Cobra Court
Manchester M32 0TR
United Kingdom
Tel +44 161 848 8411
Fax +44 161 848 0966
sales.elantas.uk@altana.com
www.elantas.com

Sales office Central :

ELANTAS Beck GmbH
Grossmannstr. 105
20539 Hamburg
Germany
Tel +49 40 78946 0
Fax +49 40 78946 349
info.elantas.beck@altana.com
www.elantas.com

Sales office South :

ELANTAS Camattini S.p.A.
Strada Antolini n°1 loc. Lemignano
43044 Collecchio (PR)
Italy
Tel +39 0521 304711
Fax +39 0521 804410
info.elantas.camattini@altana.com
www.elantas.com

Our advice in application technology given verbally, in writing and by testing corresponds to the best of our knowledge and belief, but is intended as information given without obligor, also with respect to any protective rights held by third parties. It does not relieve you from your own responsibility to check the products for their suitability to the purposes and processes intended. The application, usage and processing of the products are beyond our reasonable control and will completely fall into your scope of responsibility. Should there nevertheless be a case of liability from our side, this will be limited to any damage to the value of the merchandise delivered by us. Naturally, we assume responsibility for the unobjectionable quality of our products, as defined in our General Terms and Conditions

Producer: ELANTAS Beck GmbH, Großmannstraße 105, D-20539 Hamburg

www.elantas.com