ELANTAS
Electrical Insulation

EN

Technical Data Sheet

Bectron®

SK 75V2-45 / SH 79V2-45 1:1

Electronic 2 Part Silicone Potting Compound

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Area of application

Thanks to its elastic properties and long-term thermal resistance Bectron® SK 75V2-45 system is successfully used for encapsulation of very sensitive electronic circuits and components operating in very high temperatures.

Processing methods

Pre-treatment: The components to be treated should be clean dry and free from grease.

Compatibility between the resin and all materials of the component should be checked prior to use.
Bectron® SK 75V2-45 and cross linker Bectron® SH 79V2-45 contain filler materials which tend to settle and must be stirred in the original containers to restore the homogenous composition before processing.

Mixing: The two components should be mixed in the prescribed ratio. Care should be taken because air may be entrapped 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: Working time is about 60 minutes; viscosity will start to build up after mixing. It is recommended to prepare only the quantity of product that can be applied in this timeframe.
All vessels, pipes and equipment used must be thoroughly cleaned because the Pt catalyst of this system may be easily poisoned by traces of Sulphur compounds, amines or tin salts. This would seriously inhibit the cross-linking reaction.

Curing: Cure will be completed at room temperature in about 24 hours.
A 10°C increase in temperature will approximately halve the curing time.

Description

Bectron® SK 75V2-45 when mixed with Bectron® SH 79V2-45 will cure at room temperature to a flexible rubber in about 24 hours.
Elasticity and dielectric properties of the final rubber remain largely stable in a wide range of temperatures, between -55°C and +200°C.
A 1:1 mixing ratio allows easy and safe processing of the system.

Key Properties:

- Addition cure system
- Curing at room temperature
- Cure can be accelerated with heat
- Long term thermal resistance
- Low shrinkage
- Thermal conductivity
- Classified UL 94 V0

Storage and stability

Products should be stored in their original sealed containers to avoid any potential contamination at a temperature below 35°C. Store accordingly to any specific instruction listed on the product label. Products should be used prior to the expiring date marked on the label.

Handling precautions

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

SYSTEM SPECIFICATIONS

Property	Conditions	Method	Bectron® SK 75V2-45	Bectron® SH 79V-45	Units
Viscosity	25°C	DIN 53019	2000 ÷ 6000	1500 ÷ 3500	mPas
Specific gravity	20°C	EN/DIN/ISO 2811-1	1.76 ÷ 1.86	1.71 ÷ 1.81	g/ml

TYPICAL SYSTEM CHARACTERISTICS

Property	Bectron® SK 76V2-45	Bectron® SH 79V5-45
Colour	Beige	Beige
Shelf Life	12 months	12 months

TYPICAL CHARACTERISTICS OF THE MIX

Mixing Ratio (parts by weight)	1:1
Viscosity of mixture @ 25°C [mPas]	3200
Working Time at Room Temperature [min]	60

TYPICAL MECHANICAL PROPERTIES OF THE CURED PRODUCT

Test	Value
Specific Gravity @ 20°C [g/cm^3]	1.79
Hardness [Shore A]	45
Water Absorption [mg] 23°C for 24h at RT	21

TYPICAL THERMAL PROPERTIES OF THE CURED PRODUCT

Test	Value
Thermal Conductivity [W/m*K]	0.54
UL 94 classification	V0

TYPICAL DIELECTRIC PROPERTIES OF THE CURED PRODUCT

Test		Value
Dielectric Strength [KV/mm]		8.0
Dielectric Constant 50 Hz,1000 Hz, 10000Hz	at 20 °C	4.5
Volume Resistivity [Ω·cm]		9.0*10^{14}
Volume Resistivity [Ω·cm] after 7 days of water immersion		2.2*10^{11}

Our advice given verbally or in writing is based on the present state of our technical knowledge, but is intended as information given without obligation, also with respect to any protective rights held by third parties. It does not relieve your own responsibility to check the products for their suitability to the purposes and processes intended and in accordance with the technical sheets of the products. The application usage and processing of the product are beyond our control and will completely fall into the scope of responsibility of buyers and users. Should there nevertheless be a case of liability from our side, this will be limited to any damage equivalent 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 condition