ELANTAS
Distributeur : JBG-METAFIX

EN

Technical Data Sheet

Bectron®

SH 79V5-35/SK 75V2-35

100:100

Electronic Silicone - 2 Part - Addition cure
Silicone Potting Compound

ELANTAS Europe Sales offices:

Collecchio (PR) 43044 - Italy
Strada Antolini n° 1 loc. Lemignano
Tel +39 0521 304777 Fax +39 0521 804410

Hamburg 20539 - Germany
Großmannstrasse. 105
Tel +49 40 78946 0 Fax +49 40 78946 349

Quattordio (AL) 15028 - Italy
Via San Martino, 6
Tel +39 0131 773870 Fax +39 0131 773875

bectron.elantas.europe@altana.com
www.elantas.com/europe

Product description

The Bectron® SK 75V2-35 / SH 79V5-35 system is a two component silcon rubber. The coulor of the system is blue.

Key Properties

- Addition cure system
- Curing at Room Temperature
- Long working time (>180 min)
- Cure can be accelerated with heat
- Long term thermal resistance
- Elasticity
- Low hardness
- Classified UL 94 V1 (internal test)

Areas of application

Bectron® SK 75V2-35 cross-linked with Bectron® SH 79V5-35 is specifically designed for protection of electronic parts and components against high temperatures. Possibility of accelerated cure at high temperatures allows use in mass production manufacturing lines.

Processing methods

Pre-treatment: parts and components to be potted should be clean, dry and free from grease. Compatibility between Bectron® SK 75V2-35 system and all materials to be in contact with should be checked prior to use. 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.

Mixing: Bectron® SK 75V2-35 and Hardener Bectron® SH 79V5-35 should be mixed at the ratio specified and stirred thoroughly immediately prior to processing. During stirring some air may be introduced in the system. Evacuation under vacuum may be needed to obtain a bubble free elastomer.

Application: Working time is about 75 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. Cure will be completed at room temperature in about 12 hours.

Curing/Post-curing

Bectron® SK 75V2-35 when mixed with Bectron® SH 79V5-35 will cure at room temperature to form a resilient elastomer in about 12 hours. Cure can be accelerated with heat. Elasticity and dielectric properties of the final gel remain largely stable in a wide range of temperatures, between -50 °C and +180 °C. A 1:1 mixing ratio allows easy and safe processing of the system.
Recommended curing conditions:

- 12 hour at Room Temperature
- 30 minutes at 60°C

For application where dimensional precision is important it is recommended to cure at room temperature.

Storage and stability

Product should be stored in its original sealed container to avoid any potential contamination at a temperature between 5°C to 30 °C. Store accordingly to any specific instruction listed on the product label. Product should be used prior to the expiring date marked on the label.

Handling precautions

Refer to the safety data sheet and comply with regulations relating to industrial health and waste disposal.

Sales specifications

SH 79V5-35

Properties	Conditions	Test Method	Value	M/U
Viscosity	25 °C	DIN 53019 (Internal Test V18/b/c)	700 ÷ 1100	mPa·s
Specific Gravity	20 °C	DIN EN ISO 2811-1	1.30 ÷ 1.40	g/ml

SK 75V2-35

Properties	Conditions	Test Method	Value	M/U
Viscosity	25 °C	DIN 53019 (Internal Test V18/b/c)	950 ÷ 1450	mPa·s
Specific Gravity	20 °C	DIN EN ISO 2811-1	1.36 ÷ 1.46	g/ml

SK 75V2-35 / SH 79V5-35

Properties	Conditions	Test Method	Value	M/U
Gel time	40 °C	DIN 16945 (Internal Test H17B1)	20 ÷ 30	min

Typical system properties

SH 79V5-35

Properties	Conditions	Test Method	Value	M/U
Colour		--	Blue	
Shelf life	5°C to 30°C	Internal Test	12	months

SK 75V2-35

Properties	Conditions	Test Method	Value	M/U
Colour		--	beige	
Shelf life	5 to 30 °C	Internal Test	12	months

Typical properties of the mix

Properties	Conditions	Test Method	Value	M/U
Mix ratio by weight		--	100 : 100	
Mixed Viscosity	25 °C	DIN 53019	1050	mPa·s

Typical mechanical properties of the cured product

Properties	Conditions	Test Method	Value	M/U
Hardness	32 - 23 °C	DIN 53505	35	Shore A/1
Specific Gravity	20 °C	DIN 53217	1,38	g/ml
Water absorption		ISO 62	0,2	%

Typical thermal properties of the cured product

Properties	Conditions	Test Method	Value	M/U
Thermal conductivity		DIN 52613	0,30	W/(m·K)
Flammability	11mm	IEC 60707/IEC 60695-11-10 (Internal Test M25c)	V-1	

Typical dielectric properties of the cured product

Properties	Conditions	Test Method	Value	M/U
Tracking Index		IEC 60112	600 M	CTI
Volume resistivity	23 °C	IEC 60464 -2 (Internal Test M5)	1×10^{15}	Ω·cm
Dielectric Strength	23°C	IEC 60464-2 (Internal Test M6)	30	kV/mm
Dielectric constant at 10 kHz	24 °C	IEC 60250 (Internal Test M03b)	3,3	
	180 °C		3,1	
Dielectric dissipation at 10 kHz	24 °C	IEC 60250 (Internal Test M03b)	< 0,01	
	180 °C		< 0,01	