SilSo Cool 21005 (ESP895)

Characterisation

Silicone Gap Filler. SilSo Cool 21005 is a 2 part addition cure silicone compound with high thermal conductivity. The product is mixed in a 1:1 ratio and is thixotropic. The product conducts heat well, has high temperature stability and is recommended for use with electronics.

Technical Data

	SilSo Cool 21005 A Component A	**SilSo Cool 21005 B** Component B		
Appearance	Thixotropic Paste	Thixotropic Paste		
Colour	Blue	White		
Viscosity	361,000	356,000	Pa·s	Brookfield HB #7@10RPM
Density	3.10	3.06	g/cm³	
	Mixture			
Mixing ratio	1 : 1		by weight	
Viscosity	360,000		Pa·s	Brookfield HB #7@10RPM
Potlife	31		min	Time to double viscosity
Cure Time	30		min	@100°C
	Vulcanisate after 24 h			
Hardness Shore 00	67			ASTM D2240-95
Tensile strength	0.33		N/mm^2	BS903 Part A2
Elongation at break	50		%	BS903 Part A2
	Electrical & Thermal Properties			
Thermal Conductivity	3.14 - 4.21		$Wm^{-1}K^{-1}$	ASTM E1530-11
Volume Resistivity	1.40×10^{13}		Ωcm	ASTM D257
Working temperature	-70 to +260		°C	
CTE linear	18		ppm	
CTE Volumetric	53		ppm	
Dissipation factor @ 1kHz	3.4692×10^{-2}			ASTM D150
Dielectric Constant @ 1kHz	7.55			ASTM D150
CTI	TBC			IEC 60112:2009-10
Dielectric Strength	7.6		$kVmm^{-1}$	ASTM D149
UL94 Rating	V0 (potential)			
The catalyst is contained in component A				

Storability / Storage

If stored properly, the storability of components A and B is 12 months. It is absolutely important to store the products in closed original containers at temperatures below 30 °C and protected from frost.

The above given values are product describing data. Please consult the 'delivery specification' for binding product specifications. Further data about product properties, toxicological, ecological data as well as data relevant to safety can be found in the safety data sheet.

Application Technique

Processing

1. Catalysis

SilSo 21005 components A + B are mixed at a certain mixing ratio (see Technical Data). The two components are mixed by hand or by dispensing machine.

2. Vulcanisation

At 23 °C the system vulcanises as described under Technical Data.

Remarks:

The contact with the following substances may delay or even prevent the vulcanization:

- chlorine or butyl rubbers containing sulphur
- stabilisers and softeners
- amine hardeners in epoxy resins
- various organic solvents, e.g. ketones, alcohols, ethers, etc.

In case of doubt, we recommend carrying out pre-trials.

The data given in this technical leaflet result from our experience. They correspond with the best of our knowledge and serve for advising our customers.
However, they are not binding. Please observe the trademark rights of third parties.

We reserve the right to modify the product and technical leaflet.

Our department for applied technique is always at your service for further information and advice.

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CHT Germany GmbH
Postfach 12 80, 72002 Tübingen, Bismarckstraße 102, 72072 Tübingen, Germany
Telephone: 07071/154-0, Fax: 07071/154-290, Email: info@cht.com, Homepage: www.cht.com