KP 97, 98, 99 & KP 12

KERATHERM® Thermal Grease

Applications

- notebooks
- desktop CPU´s
- IGBT unit

Benefits

- syrings: 5 ml
- cartouche:
  75 ml / 310 ml / 360 ml
- cans: 0.5 kg / 1.0 kg

KERATHERM® Thermal Greases are ceramic-filled single component silicones with a high thermal conductivity. The non-crosslinked thermal compounds do not dry out. The silicone components do not leak from the compound.

The thermal grease KP 99 is a high-quality thermal grease. The homogeneous and thixotropic grease shows a very good fluidity thanks to its good viscosity characteristics. An optimum surface adaptation is guaranteed.

The silicone free thermal compound KP 12 consists of synthetic, thermal polymers and is suitable for a fast and effective heat dissipation. The paste is particularly suitable for silicone sensitive applications.

Properties	Unit	KP 97	KP 98	KP 99	KP 12 silicone free
Colour		white	grey	anthracite	silver
		← soft/pasty →			
Thermal Properties					
Thermal resistance R_{th}	K/W	0.0120	0.0100	0.0068	0.0060
Thermal impedance R_{ti}	°Cmm²/W	4.5	4.1	2.7	2.2
	Kin²/W	0.007	0.0064	0.0042	0.0033
Thermal conductivity λ	W/mK	5.0	6.0	9.2	10.0
Electrical Properties					
Electrical conductivity (according to DIN 51412-1)	pS/m	0	0	0	53
Mechanical Properties					
Measured thickness (+/-10%)	mm	0.025	0.025	0.025	0.025
Physical Properties					
Application temperature	°C	-60 to +200	-60 to +200	-60 to +200	-60 to +150
Density	g/cm³	2.1	2.2	1.9	1.4
Viscosity *	Pas	70 - 110	110 - 150	90 - 140	30 - 60
Total mass loss (TML)	Ma.-%	< 1.3	< 1.5	< 0.80	< 0.1
Possible thickness	mm	← variable →			
Long therm stability (1000h / 85°C / 85 % relativ humidity)					
Thermal resistance 1000h	K/W	0.0120	0.0080	0.0068	0.0060

*Shear rate $4s^{-1}$ / 25°C

The KP´s long-term stability guarantees full operability during the entire life time of the product. Under normal application conditions, KERATHERM® Thermal Grease does not cure, dry out or melt. Special storage of KERATHERM® "Thermal Grease" is not required, therefore it can be stored under normal climate conditions for up to 12 months after manufacturing date.

If any separation of the filler materials becomes evident, the KP´s must be mixed thoroughly before use.

Special packing on request!

Data for engineer guidance only.
Observed performance varies in application.
Engineers are reminded to test the material in application.

NOTE:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. KERAFOL® is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. All specifications are subject to change without notice. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded. In case KERAFOL® would be nevertheless held liable, on whatever legal ground, KERAFOL®'s liability will in no event exceed the amount of the concerned delivery. All KERAFOL® products are sold pursuant to the KERAFOL®'s Terms and Conditions of sale and delivery in effect from time to time, a copy of which will be furnished upon request.

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