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version: 2.0

Technical Data on silicone-free thermal transfer compound WLPF

Application

WLPF thermal conductive paste ensures a safe operation as well as rapid and safe thermal conduction by making a thermal connection between a semiconductor and a heatsink.

The silicone-free thermal conductive paste should always be used if there is a danger of contamination of contact systems by silicone or the application is located in a silicon sensitive area.

Purpose:

Using the thermal conductive paste the heat transfer between semiconductor components and heatsinks can be significantly reduced. WLPF is electrically non-conductive but it is no insulator, and it adapts itself perfectly to any unevenness in the surfaces being processed.

Special features:

It is resistant to oxidation and ageing, suitable for use over a large temperature range, nontoxic, has virtually no smell, low oil separation, very low thermal resistivity and it is chemically neutral to a large extent with respect to metallic and plastic materials.

The dielectric properties change slightly depending on the operating temperature. WLPF does not run out from the joint under a thermal load and it does not dry or harden.

Examples for applications:

By applying WLPF thermal conductive paste, an optimum adaptation to any roughness in the surfaces of semiconductors and heatsinks is ensured.

Air inclusions with poor conduction of heat are positively prevented WLPF is successfully used for all kinds of components including transistors, diodes, thyristors and other integrated devices.

Classification as a hazardous material:

Please see material safety data sheet

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typical key figures

temperature range	-40 to +150	°C
colour	white-gray	
NLGI grade	2-3	The indication refers to the unworked penetration.

thickener

unworked penetration
 thermal conductivity at 25 °C
 oil separation (40 °C/168 h)
 flow pressure +20 °C

Bentonite / metal oxides

250 – 290	1/10 mm	DIN ISO 2137
approx. 0,5	W/mK	methode PTB
≤ 2	%	DIN 51817
≤ 200	mbar	DIN 51805

base oil

kin. viscosity at 40 °C
 kin. viscosity at 100 °C

Synthetic ester

approx. 90	mm ² /s	DIN 51562
approx. 13	mm ² /s	DIN 51562

storage conditions

It is recommended that WLPF thermal conductive paste is stored at room temperature.
 A shelf life of 3 years from filling date.

Note:

The above data accords with up-to-date practice. Deviations within usual tolerances are possible but they will not affect the function.
 Although the above information has been thoroughly prepared and checked, the rights to correct errors and to make technical modifications are reserved.