Dr.D. Müller AHLHORN

Precision components
made of flexible and rigid materials

Thermally conductive products

Thermiglue® TL 23019

Description:

Thermiglue® TL 23019 is a two-component thermally conductive gel that can be solidified into a flexible and thermally conductive elastomer at room temperature or high temperature. Thermiglue® TL 23019 is a preformed thermal gap filling material that corresponds to a thermally conductive silicone gasket after curing. Thermiglue® TL 23019 meets the requirements for low pressure and high compression modulus. Thermiglue® TL 23019 provides good contact with electronic products, increases the effective contact area, reduces thermal contact resistance, and is suitable for heat dissipation modules or electronic components with large thickness fluctuations.

Properties:

Thermiglue® TL 23019 has high thermal conductivity, low thermal resistance, good wettability and lower assembly load. Thermiglue® TL 23019 is easy to use and has high reliability after curing. Thermiglue® TL 23019 corresponds to a thermal pad and has no volatilization. After curing, the module is low, which greatly reduces the stress caused by thermal expansion and the damage caused by vibration.

Applications:

Thermiglue® TL 23019 is used in network terminals/5G cellular communications, new energy batteries, automotive electronic application devices, electronic medical/electrical equipment, between fragile components and enclosures

Colour:

white + grey

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info@mueller-ahlhorn.com | www.mueller-ahlhorn.com | Seat of the company: Ahlhorn
Managing Director: Dr. Michael Müller | AG Oldenburg: HRB 209026 | Ust. ID-Nr.: DE 295969093
St.-Nr.: 68/207/07677 | Certified according to ISO 9001:2015 and ISO 14001:2015
UL recognised repacker E341377

- Production and distribution of electrical insulation materials, thermally conductive products, seals and technical films
- Production of stamped parts, blanks and moulded parts
- Cutting/assembly of films and adhesive tapes
- CNC machining, laser cutting and water jet cutting

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Forms of delivery: Thermiglue® TL 23019 is supplied in the sizes 50ml, 100ml and 400ml. Other containers on customer request.

Storage conditions: Thermiglue® TL 23019 should be stored at room temperature in dry rooms.

Properties	Test-Method	Unit	Value
Color A/B	Visual	-	white + grey
Extrusion Rate	90psi@φ1.85mm	g/min	15
Mixing ratio	ASTM D149	-	1:1
Hardness	GB/T531	Shore AO	30 ± 5
Hardness	ASTM D2240	Shore OO	70 ± 10
Specific Gravity	ASTM D792	g/cm^3	3,26
Breakdown Voltage	ASTM D149	KV/mm	≥10
Volume Resistivity	ASTM D257	Ωcm	1×10^{12}
Weight Loss	@150℃240H	%	≤0,3
Continuous Use Temp	-	℃	-40 to +150
Flammability	UL-94	-	V-0
Surface dry time	ASTM C679	min	45
Thermal Conductivity	ISO 22007	W/mK	6,0 ± 0,3
Thermal Conductivity	ASTM D5470	W/mK	6,0 ± 0,3
Thermal Impedance	ASTM D5470	$℃in^2/W$	0,318
Thermal Impedance	ASTM D5470	$℃cm^2/W$	2,050
Specific Heat Capacity	ASTM E1269	J/g/k	0,812

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Trademark information: Thermiglue® is a registered trademark of Dr Dietrich Müller GmbH, Germany.

Please note: The information in this technical data sheet is based on our current knowledge and experience. Due to the wide range of possible influences during application, it does not exempt the processor and user from carrying out their own tests and trials. A legally binding guarantee of certain properties or suitability for a specific application cannot be derived from our information. Depending on the individual case, we recommend consulting us. The recipient of our products is responsible for observing any industrial property rights and existing laws.