

TH949-1

Silicone Thermal Putty

Description

TH949-1 is one-part thermally conductive putty based on silicone resins. It has low bleed and non-flow. It is designed for very good thermal conduction with high electrical insulation.

- High thermal conductivity (7W/mk)
- High compressible
- Electrically insulation
- Low outgassing

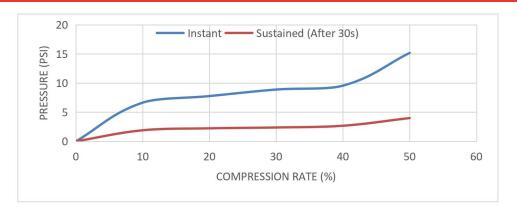
Applications

Thermal conductive interface material for electronic parts and devices.

Uncured Properties	Typical Value	Unit	Test Method	
Color	Light grey	-	PEN 10	
Density	3.17	g/cm ³	PEN 14	
Thermal conductivity	6.8	W/mK	ASTM D5470	
Thermal resistance	1.10	K.cm ² /W	ASTM D5470	
Viscosity, 25°C	4,537,370	сР	PEN 144	
Extrusion rate, no tip, 50psi, 25°C	1.43	g/min	PEN 107	
Minimum bond line thickness	0.13	mm	-	
Operating temperature	-40 to 200	°C	PEN 92	
Volume resistivity	2.9×10^{10}	Ohm.cm	PEN 65	
Volatile content, 150°C/72hrs	0.33	%	PEN 92	
Volatile content				
a) 30 - 150°C	0.04	%	PEN 92	
b) 30 - 200°C	0.08	%	PEN 92	
Flammability, UL94	V-0	-	PEN 55	
Bleed test, 100°C/100h, blot width	7.0	mm	PEN 99	

^{*} The values above are tested based on batch to batch basis. These values are not use as a basis for preparing specifications.

Compression deflection



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Penchem Technologies Sdn Bhd (767120-A)

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^{*} PEN is refer to Penchem standard test method, ASTM is for Test reference only

^{*} Viscosity was measured by MCR-72 rheometer, PP25/s, 0.50mm gap, 0.50s⁻¹, 25.0°C.



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Compression rate (%)	10	20	30	40	50
Initial pressure (psi)	6.63	7.76	8.88	9.55	15.17
Sustained pressure (psi)	1.89	2.226	2.37	2.67	3.99

Remark: Specimen dimension- 25mm x 25mm x 1.0mm

Guideline of Use

- 1. Wear rubber glove when handling the silicone putty.
- 2. Scoop a quantity of the silicone putty from the container using a stainless steel spatula.
- 3. Work and knead the putty around electronic part and circuit by hand.
- 4. This product may be dispensed with a variety of manual and automatic applicators or other equipment as required. The user is responsible to determine the suitability of the product for all intended uses.
- 5. Wipe off any excess putty with a piece of dry cloth. Further cleaning of residues may be achieved by wiping with cloth wetted with isopropanol.

Storage & Shelf Life

Tightly close original packaging of unused product and store at room temperature. Avoid prolong exposure to sunlight.

Shelf life:18 months

Packaging

- 500g plastic jar
- 5ml EFD syringe
- 10ml EFD syringe

Other packaging enquiry, please contact our sales department.

Environment, Health & Safety

This product is intended for industrial use only. For more safety information, please refer to Product Safety Data Sheet (SDS).

General Information

All right reserved. This information in this document is subjected to change without notice.

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