

# TH930-2

# **Silicone Thermal Putty**

# Description

TH930-2 is a one-part black colored thermal conductive interface material based on silicone resins. It is designed for very good thermal conduction with high electrical insulation.

#### **Features**

- High thermal conductivity
- High compressible
- Non electrical conductive

#### **Applications**

Thermally conductive silicone based putty for use as thermal interface material for electronic component.

Properties	Typical Value	Unit	Test Method
Color	Black	-	PEN 10
Specific gravity	3.06	g/cm <sup>3</sup>	PEN 14
Flow test, 45° incline	No flow	mm	PEN 15
Extrusion rate			
i) 2.5mm orifice, 50psi	3.9	g/min	PEN 107
ii) tapered plastic tip, GA22 (0.41mm), 60psi	0.03	g/min	PEN 107
Minimum bond line thickness	0.10	mm	-
Thermal conductivity	5.0	W/mK	ASTM D5470
Thermal resistance	2.9	K.cm <sup>2</sup> /W	ASTM D5470
Volume resistivity	>1.0 x 10 <sup>14</sup>	Ohm-cm	ASTM D257
Volatile content @ 85°C	0.09	%	PEN 92
Volatile content @ 150°C	0.39	%	PEN 92
Operating temperature	-60 to 200	°C	PEN 92

<sup>\*</sup>The values above are tested based on batch to batch basis. These values are not used as a basis for preparing specifications.

# **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 or plastic spatula.
- 3) Work and knead the putty around electronic part and circuit by hand.
- 4) This product may be dispensed by pneumatic dispenser or other dispensing equipment with an appropriate needle. Increasing the dispensing temperature (eg. 60°C) can ease the dispensing process. The user is responsible to determine the suitability of the product for all intended uses.
- 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.

#### **Features**

This product has 12 months of shelf life from date of manufacturing, unless otherwise specified, when stored at room temperature in the original and unopened container.

# **Environment, Health & Safety**

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

# **Applications**

- 30ml syringe
- 500g plastic jar

Other packaging enquiry, please contact our sales department.

#### **General Information**

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

Revision P02: 2-Apr-2023

Penchem Technologies Sdn Bhd (767120-A),

Address: 1015, Jalan Perindustrian Bukit Minyak 7, Kawasan Perindustrian Bukit Minyak, Mk.13, 14100 Penang, Malaysia. Tel: +604-501 5976, 77, 78

Fax: +604-501 5979 Email: enquiry@pench Website: www.penchem.com





<sup>\*</sup> PEN is referring to Penchem's standard test method; ASTM is for test reference only.

<sup>\*</sup> Extrusion rate were measured with 30cc EFD syringe, at 25.0+/-3°C.