

# **N800CH**

## **Non-Silicone Thermal Conductive Pad**

Non-Silicone Thermal Compound N800CH is made of non-silicone resin material. No low molecular siloxane volatilization and low total volatile gas, no electrical contact & pollution problems. N800CH is flexible and has great thermal conduction, Low compressive stress and high compressive characteristics can effectively reduce the stress load of components, so that the equipment only needs to bear less mechanical stress, and at the same time, it can have low thermal resistance and high thermal conductivity.

#### **■ FEATURES**

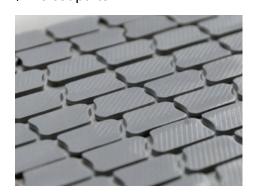
- / Thermal conductivity:15.0 W/m\*K
- / It's made by non-silicone resin materials
- / Low contact thermal resistance
- / With electrical insulation
- / Outstanding thermal conductivity
- / Applicable to optical and sensitive electric components

#### **■ TYPICAL APPLICATION**

- / HDDS
- / Optical appliance
- / 5G base station & infrastructure
- / EV electric vehicle

#### ■ SPECIFICATIONS

/ Sheet form / Die-cut parts

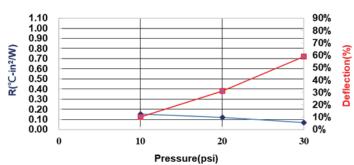


#### **■ TYPICAL PROPERTIES**

PROPERTY	N800CH	TEST METHOD	UNIT
Color	Gray	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	3.3	ASTM D792	g/cm³
Hardness	50	ASTM D2240	Shore OO
Application temperature	-60~125	-	°C
Low molecular Siloxane (D3 to D20 total)	N.D	Gas Chromatography	%
Outgassing CVCM (wt%)	0.0040	By LiPOLY	-
ROHS & REACH	Compliant	-	-
COMPRESSION@1.0mm			
Deflection @10 psi	10	ASTM D5470 modify	%
Deflection @20 psi	31	ASTM D5470 modify	%
Deflection @30 psi	59	ASTM D5470 modify	%
ELECTRICAL			
Dielectric breakdown	8	ASTM D149	KV/mm
Surface resistivity	>1011	ASTM D257	Ohm
Volume resistivity	>1010	ASTM D257	Ohm-m
THERMAL			
Thermal conductivity	15.0	ASTM D5470	W/m*K
Thermal impedance@10 psi	0.153	ASTM D5470	°C-in²/ W
Thermal impedance@20 psi	0.119	ASTM D5470	°C-in²/ W
Thermal impedance@30 psi	0.067	ASTM D5470	°C-in²/ W

The chemical formula indicates that if Cyclic polydimethylsilox-ane (HO-[Si(CH3)20]n-H) is non-reaction, it's volatile anytime and everywhere. For example, when the electric products which has been put in a confined space, the volatile of low-molecular-weight silox-anes will makes the elecetic products uncontacted.

### Thermal Impedance vs. Pressure vs. Deflection



Note: All specifications provided by LiPOLY are subject to change without notice. The test methods used by LiPOLY are based on the TIM Tester method and ASTM D5470 test method. These test methods are used as the definition standards for LiPOLY Property values provided in this document are not for product specifications or guaranteed. This document does not guarantee the performance of the product and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product and verify the performance o