

# N700B

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

LiPOLY N700B is silicone-free thermal interface materials which are suitable for the cooling of components which may be effected by silicone outgassing such as optical devices, automotive electronics or military hardwear.

#### Features-

- •Thermal conductivity: 3.0 W/m\*K
- •It's maked by non-silicone resin materials
- Low contact thermal resistance
- •With electrical insulation
- Outstanding thermal conductivity
- •Qualified for UL94V-0
- Applicable to optical and sensitive electric components

### **Typical Applications-**

- HDDS
- Optical appliance

#### **Specifications-**

- Sheet form
- Die-cut parts



#### **Typical Properties-**

PROPERTY	N700B	TEST METHOD	UNIT
Color	Red	Visual	-
Surface tack 2-side/1-side	2	-	-
Thickness	Customized	ASTM D374	mm
Density	2.6	ASTM D792	g/cm³
Hardness	60	<b>ASTM D2240</b>	Shore OO
Application temperature	-60~125	-	°C
COMPRESSION@1.0mm			
Deflection @10 psi	27	ASTM D5470 mg	odify %
Deflection @20 psi	42	ASTM D5470 mg	odify %
Deflection @30 psi	51	ASTM D5470 mg	odify %
Deflection @40 psi	58	ASTM D5470 mg	odify %
Deflection @50 psi	63	ASTM D5470 mg	odify %
ELECTRICAL			
Dielectric breakdown	10	ASTM D149	KV/mm
Surface resistivity	>1011	ASTM D257	Ohm
Volume resistivity	>1010	ASTM D257	Ohm-m
THERMAL			
Thermal Conductivity	3.0	<b>ASTM D5470</b>	W/m*K
Thermal impedance@10psi	0.39	<b>ASTM D5470</b>	°C-in²/W
Thermal impedance@30psi	0.16	<b>ASTM D5470</b>	°C-in²/W
Thermal impedance@50psi	0.10	ASTM D5470	°C-in²/W
FLAME RATING			
UL Flammability class	V-0	UL94	-

The chemical formula indicates that if Cyclic polydimethylsiloxane (  $HO-[Si(CH_3)_2O]_n-H$  ) 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 electric products uncontacted.

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 and quality required for the purchaser specific purpose. The purchaser needs to evaluate and verify the safety before using the material. We strongly recommend the purchaser pre-test the product and verify the performance of the product under the purchaser's specific conditions. Liability and use of the product are the responsibility of the end user. LiPOLY makes no warranty as to the suitability, merchantability, or non-infringement of any LiPOLY method product for any specific or general uses. LiPOLY shall not be liable for incidental or consequential damages of any kind. All LiPOLY products are sold in accordance with the LiPOLY Terms and Conditions in effect at the time of purchase and a copy of which will be furnished upon request. All rights reserved, including LiPOLY trademarks or registered trademarks of LiPOLY or its affiliates. Statements concerning possible or suggested uses made herein shall not be relied upon or be constructed as a guaranty of patent infringement. Copyright 2019 LiPOLY.