PAKCOOL® Thermally Conductive Phase Change Pad SPC-7630

Key Features and Benefits

- **The material exhibits a significant reduction in hardness after reaching the phase transition temperature**
- **Self-adhesive with excellent conformability**
- **Upon reaching the phase transition temperature, the material maintains a non-fluid state without leakage**
- **Low stress, more effectively protecting electronic components**

Description

PAKCOOL® SPC-7630 thermal phase-change pad are designed with thermal conductivity and phase-change properties. Its key characteristics include a significant reduction in hardness and enhanced surface self-adhesion after reaching the phase-change temperature, effectively filling gaps between heat sources and heat sinks to ensure excellent thermal conduction performance. Additionally, its non-fluid state post-phase transition prevents material leakage at high temperatures. Compared to traditional thermal interface materials, this product exhibits lower thermal resistance at the same pressure after reaching the phase-change temperature. PAKCOOL® SPC-7630 is electrical insulation and has high thermal conductivity at pressures ranging from 20 to 100 psi (0.14 to 0.69 MPa). Products can be customized to meet customer's special requirements.

The surface of PAKCOOL® SPC-7630 possesses a certain level of tackiness. This feature eliminates the need for other adhesives that could affect thermal performance, facilitating easier mass production processing. All pads are supplied with an easily removable dust-proof film on both sides, enhancing their usability and maintaining cleanliness.

Applications

- **High-power LEG、Communication devices、Wireless base station**
- **Storage module、Chip**
- **High-performance computing and other high-heat-dissipation applications**

Configuration

- Sheet form or die-cut form
- without pressure sensitive adhesive
- Custom dimensions are available

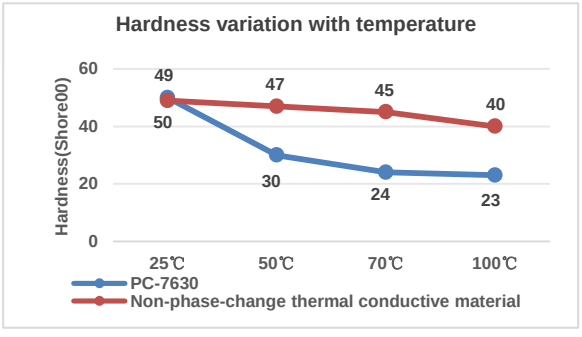
Storage

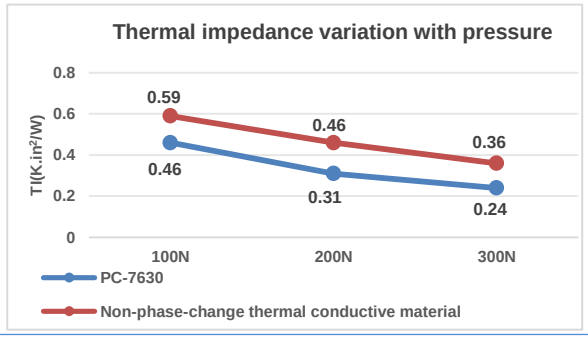
- Store in a cool, dry place out of direct sunlight
- Suggest the shelf-time not more than 24 months

Technical Parameters

Typica l Properties	SPC-7630	Test Methods
Color	Grey	**Visual**
Thermal Conductivity (W/m·K)	3.0±0.1	**ASTM D5470**
Thermal Impedance @20psi,0.5mm ($K\text{-}in^2/W$)	0.34	**ASTM D5470**
Thickness* (mm)	0.3—5.0	**ASTM D374**
Density (g/cm^3)	2.95±0.05	**ASTM D792**
Hardness (Shore OO)	50±10	**ASTM D2240**
Phase transition temperature（℃）	42-52	**DSC**
Volume Resistivity (Ω·cm)	⩾2.0×10^{13}	**ASTM D257**
Continuous Use Temperature (℃)	-40～+100	--
***Standard Thickness (mm): 0.3, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5**		

Note: Data is for guidance only and should not be used as product specifications.





The data of this specification are obtained under laboratory conditions. However, because of the difference of use environment, process and so on, it can not guarantee the correctness and applicability of the product in some usage and use. When using, be sure to test to confirm the product suitable for your purpose. If you have any problems in using this product, please contact our technical department. We will do our best to help you.

Shanghai Chooyu Chemical Co., Ltd
Building 5, No. 852 Jinyun Road, Shanghai
Tel: (+86) 021-52842801
E-mail: sales@chooyuchem.com
www.chooyuchem.com

Qingdao Chooyu Advanced Material Co., Ltd
820 Chunyang Road, High-Tech Zone,Qingdao
Tel: (+86) 0532-58717889
E-mail: sales@chooyuchem.com
www.chooyuchem.com

Shenzhen Chooyu Advanced Materials Co., Ltd
Room 9C, Mingzhu Business Building, No. 864
Longhua Avenue, Longhua District, Shenzhen
Tel: (+86) 18100278391
E-mail: sales@chooyuchem.com
www.chooyuchem.com