



5.0 W/mK Non Silicone Thermal Pad 10 Psi High Conductivity Thermal Pad Flame Retardant

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: zhonglei
- Minimum Order Quantity: 100 m²
- Packaging Details: carton



Product Specification

- Adhesion Strength: Strong
- Color: Grey
- Curing Method: Room Temperature Or Heat Cure
- Hardness: 50 Shore A
- Chemical Resistance: Excellent
- Tensile Strength: 10 Psi
- Highlight: **5.0 W/mK Non Silicone Thermal Pad,
Non Silicone Thermal Pad 10 Psi,
High Conductivity Thermal Pad Flame Retardant**

Product Description:

The Thermally Conductive Material is a state-of-the-art product designed to meet the demanding needs of various industries requiring efficient thermal management solutions. This product stands out as a heat conductive compound with a thermal conductivity rate of 5 W/mK, ensuring efficient heat dissipation and managing thermal loads effectively. Our thermally conductive material is engineered to maintain performance and stability even in the presence of high temperatures.

One of the essential features of this product is its inherent flame retardancy. This attribute offers an additional layer of safety, making it suitable for applications where flame resistance is critical. The flame retardant nature of this material means that it can be used in electronics, automotive, and various other industries where safety standards are uncompromising and stringent.

In addition to its thermal and flame retardant properties, this material boasts a high dielectric strength of 4.5 KV/mm, making it an excellent insulator against electrical currents. This characteristic is vital for electronic applications where electrical insulation is as crucial as thermal management. The high dielectric strength ensures that while the heat conducting material effectively dissipates heat, it also provides a robust barrier against electrical breakdowns, contributing to the longevity and reliability of the devices it is used in.

The versatility of the Thermally Conductive Material is further exemplified by its curing method. It can be cured at room temperature or through heat cure, allowing flexibility in its application across various scenarios and production processes. Whether it is an intricate electronic component or a large-scale industrial system, this material adapts to the specific curing environments present in different manufacturing setups.

Application of this compound is user-friendly and adaptable to numerous techniques; it can be dispensed or brushed onto the desired surfaces. The ease of application means that it can be integrated into assembly lines with minimal disruption or used in maintenance and repair operations. The thermal conductive putty can be applied precisely to areas where heat dissipation is necessary, offering a tailored solution to thermal challenges.

Our Heat Conductive Compound is the go-to choice for professionals and industries that prioritize efficiency and reliability. It is a thermal interface material that bridges the gap between heat-producing components and heat sinks or housing. By spreading out the heat over a larger surface area, it significantly improves cooling performance and prevents hot spots, which can be detrimental to electronic components.

Moreover, the thermal conductive putty is designed to fill gaps and uneven surfaces, providing a seamless thermal path and eliminating air gaps which can act as thermal insulators. Its consistency and durability ensure that once applied, it maintains its thermal conductivity properties over a wide range of temperatures and environmental conditions.

Compliance with environmental and safety standards is not an afterthought for this heat conducting material. It is formulated to be non-toxic, environmentally friendly, and safe for both the user and the environment. Its composition is devoid of harmful chemicals, ensuring that it can be used in sensitive applications without concern for health or environmental impacts.

In conclusion, the Thermally Conductive Material is a superior choice for managing thermal issues across a broad spectrum of applications. Its excellent thermal conductivity, flame retardancy, high dielectric strength, versatile curing options, and ease of application make it an indispensable tool for engineers and technicians. Whether for thermal management in electronic assemblies, automotive systems, or industrial machinery, our heat conductive compound provides a reliable and effective solution.

Features:

- Product Name: Thermally Conductive Material
- Hardness: 50 Shore A
- Thickness: 0.5~5MM
- Application Method: Dispensing or Brushing
- Chemical Resistance: Excellent
- Operating Temperature Range: -40°C to 125°C
- Also known as: Heat Conductive Substance
- High Thermal Conductivity Material
- Can be used as: Thermal Conductive Adhesive

Technical Parameters:

Parameter	Value
Operating Temperature Range	-40°C To 125°C
Adhesion Strength	Strong
Tensile Strength	10Psi
Hardness	50 Shore A
Thickness	0.5~5MM
Thickness Tolerance	±0.001" (±0.025mm)
Dielectric Strength	10KV/mm
Thermal Conductivity	5 W/mK
Flame Retardant	Yes

Applications:

The zhonglei brand, originating from China, has developed a premium Thermal Conductivity Material designed to meet the rigorous demands of modern thermal management applications. This product stands out for its precision, boasting a thickness tolerance of $\pm 0.001''$ ($\pm 0.025\text{mm}$), which ensures a consistent performance in various applications. With a density of 3 g/cm^3 , this Thermal Conductive Compound provides an optimal balance between lightweight characteristics and durability.

One of the prime scenarios for the application of zhonglei's Thermal Conductive Material is in the electronics industry, where devices are becoming increasingly compact and powerful, leading to higher heat generation. This heat must be efficiently dissipated to maintain device performance and longevity. As such, zhonglei's compound can be found in smartphones, laptops, and other consumer electronics, where it serves as a critical component in heat sinks and cooling modules.

In the automotive sector, the demand for reliable thermal management solutions is growing with the advent of electric and hybrid vehicles. The zhonglei Thermal Conductive Compound can be used in battery packs and power electronics, ensuring that the heat generated during operation does not compromise the vehicle's performance or safety. The material's excellent chemical resistance makes it a robust choice for the harsh environments often encountered in automotive applications.

The color grey of zhonglei's product is a testament to its professional-grade quality, and the hardness of 50 Shore A indicates a balance of flexibility and structural integrity, making it suitable for a variety of industrial applications. These include LED lighting systems, where efficient heat dissipation is crucial to maintain the luminosity and lifespan of the LEDs. The thermal conductivity of the material ensures that heat is swiftly transferred away from the LED chips to the heat sink.

Moreover, in power generation and transmission equipment, where consistent operation at high temperatures is a requirement, zhonglei's Heat Conductive Compound excels by maintaining stability and performance over a wide temperature range. Its excellent chemical resistance protects against the degrading effects of various industrial chemicals, ensuring the integrity and efficiency of the thermal interface over time.

Overall, zhonglei's Thermal Conductivity Material is engineered to perform in a wide array of scenarios, from delicate electronics to robust industrial systems, where efficient thermal management is paramount. The exacting standards of production, as reflected in its strict thickness tolerance, and its superior properties, including chemical resistance and optimal hardness, make it a top-tier solution for heat conduction needs worldwide.

Customization:

Brand Name: zhonglei

Place of Origin: China

Color: Grey

Thermal Conductivity: 5 W/mK

Adhesion Strength: Strong

Density: 3 g/cm^3

Our zhonglei brand offers a high-quality *Heat Conducting Material* specifically designed to provide efficient thermal management. This grey *Heat Conductive Compound* is perfect for a variety of applications that require excellent thermal conductivity and strong adhesion. With a thermal conductivity of 1.5 W/mK and a density of 1.73 G / Cbm , our product ensures optimal heat dissipation. The *Heat Conducting Material* can be cured at room temperature or through heat cure, offering flexibility in application methods. Made in China, this thermally conductive material is ideal for those in need of a reliable and effective solution for their thermal management needs.

Support and Services:

Our Thermally Conductive Material is designed to provide efficient heat transfer and management for a variety of applications. To ensure that you achieve the best performance from our product, we offer comprehensive technical support and services. Our team of experts is available to assist you with product selection, design guidance, and application troubleshooting to optimize thermal conductivity in your specific use case. Additionally, we provide detailed product datasheets, usage instructions, and safety information to ensure proper handling and implementation of our thermally conductive solutions. For any technical inquiries or support needs, please refer to the documentation provided with the product or access our online resources for further assistance.

Packing and Shipping:

Product Packaging for Thermally Conductive Material:

Our thermally conductive material is carefully packaged to ensure that it maintains its integrity and performance during transit. We use durable, moisture-resistant packaging materials that provide ample protection against physical damage and environmental factors. Each unit is securely sealed and cushioned within the packaging to minimize movement and prevent degradation.

Shipping Instructions for Thermally Conductive Material:

Our thermally conductive material requires special attention during shipping to preserve its thermal properties. We recommend shipping in a temperature-controlled environment to prevent exposure to extreme heat or cold, which could affect the material's performance. The product should be handled with care and kept away from direct sunlight and moisture. Ensure that the packaging remains intact and sealed until it reaches its final destination.

FAQ:

Q1: What types of applications are suitable for zhonglei thermally conductive materials?

A1: Zhonglei thermally conductive materials are designed for a wide range of applications, including thermal management in electronics, LED lighting, automotive components, and other devices where efficient heat dissipation is critical. They are suitable for use between heat-producing components and heat sinks or chassis.

Q2: Can zhonglei thermally conductive materials be customized to fit specific shapes or sizes?

A2: Yes, zhonglei offers customization options for its thermally conductive materials. Customers can request specific shapes, sizes, and thicknesses to meet the requirements of their particular applications.

Q3: What is the thermal conductivity range for zhonglei thermally conductive materials?

A3: The thermal conductivity of zhonglei thermally conductive materials can vary depending on the specific product and formulation. It is best to check the product datasheet or contact zhonglei directly for information on the thermal conductivity range of the material you're interested in.

Q4: Are zhonglei thermally conductive materials electrically insulating?




A4: Many of zhonglei's thermally conductive materials are electrically insulating to prevent electrical shorts and provide thermal conductivity simultaneously. However, the electrical properties may vary between products, so it is important to review the specifications

of the specific material you are considering.

Q5: How do I apply zhonglei thermally conductive materials to my components?

A5: The application process for zhonglei thermally conductive materials will depend on the form factor of the material (e.g., paste, pad, adhesive). Generally, the material is applied to the clean surface of the component or heat sink, ensuring that it covers the entire area intended for heat transfer. For detailed application instructions, refer to the product's technical datasheet or installation guide.



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