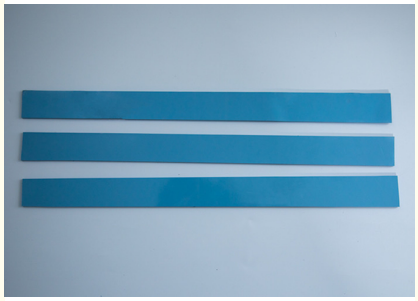
Flame Retardant Silicone Free Thermal Pad 12 Psi Tensile Strength 6.0 W/mK

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: zhonglei
- Minimum Order Quantity: 100 m²
- Packaging Details: carton
- Supply Ability: 10000



Product Specification

- Dielectric Strength: 10KV/mm
- Chemical Resistance: Excellent
- Flame Retardant: Yes
- Operating Temperature Range: -40°C To 125°C
- Thermal Conductivity: 6W/mK
- Hardness: 50 Shore A
- Tensile Strength: 12 Psi
- Highlight: **Flame Retardant Silicone Free Thermal Pad**, **Silicone Free Thermal Pad 12 Psi**

Product Description

Product Description:

Our Thermally Conductive Material is a state-of-the-art heat conductive substance designed for a wide array of applications where efficient thermal management is essential. With a hardness of 50 Shore A, this flexible and durable material can withstand moderate pressures and deformations, maintaining its shape and functionality over time. This characteristic makes it an ideal choice for applications that require both flexibility and a firm bond.

Boasting an impressive dielectric strength of 10 KV/mm, our thermally conductive compound ensures safe operation in electrical environments, effectively preventing electrical discharges and breakdowns. This feature is crucial for electronic components and assemblies where both thermal conductivity and electrical insulation are necessary to protect sensitive equipment and maintain the integrity of the system.

The chemical resistance of our thermal transmission material is excellent, allowing it to resist a variety of chemicals such as oils, coolants, and other potentially corrosive substances. This resilience makes it suitable for use in harsh environments and extends the lifespan of the material, ensuring that it continues to perform its thermal management duties without degradation due to chemical exposure.

One of the defining attributes of our product is its strong adhesion strength. Once applied, it creates a robust bond between surfaces, ensuring that the thermal pathway remains intact even in the face of mechanical stress or vibration. This adhesion reliability is paramount in applications that demand a continuous and stable thermal connection between components.

The curing method for our Thermally Conductive Material is versatile, offering the user the choice between room temperature or heat cure. This flexibility facilitates its deployment across various operational scenarios, where the conditions may vary. For a quick setting, heat can be applied to expedite the curing process, while room temperature curing is available for situations where heating is not feasible or desirable.

In terms of application, our Thermally Conductive Material is an excellent fit for electronic devices that require efficient dissipation of heat. It can be used to fill gaps between heat-generating components and heat sinks, ensuring optimal thermal transfer. Its ease of application and the ability to conform to irregular surfaces make it a versatile solution for thermal management challenges.

The thermal transmission material is also ideal for LED lighting systems, where excessive heat can lead to reduced lifespan and performance. By channeling the heat away from the LEDs, the material helps maintain a lower operating temperature, thereby preserving the brightness and longevity of the lighting system.

In the realm of automotive electronics, where high temperatures are common, our heat conductive substance ensures that critical components such as engine control units and sensors are protected from overheating. This protection is critical for maintaining the performance and reliability of the vehicle's electronic systems.

Furthermore, our product is an indispensable asset in the aerospace industry, where thermal control is vital for the operation of satellites, spacecraft, and avionics. The thermal management capabilities of our thermally conductive compound help in maintaining the necessary temperature balance, which is crucial for the success of aerospace missions.

To conclude, our Thermally Conductive Material stands out as a premium choice for any industry or application where heat dissipation and management are of the utmost importance. Its unique balance of flexibility, electrical insulation, chemical resistance, strong adhesion, and versatile curing options makes it an indispensable tool for engineers and technicians striving to optimize the thermal performance of their products.

Features:

Product Name: Thermally Conductive Material

Dielectric Strength: 10 KV/mm

Operating Temperature Range: -40°C to 125°C

Flame Retardant: Yes

Also known as: Thermally Conductive Compound

Also known as: Heat Conductive Compound

Also known as: Thermal Transmission Material

Technical Parameters:

Parameter	Value
Density	3 G / Cbm
Thickness Tolerance	±0.001” (±0.025mm)
Operating Temperature Range	-40°C To 125°C
Color	Blue
Tensile Strength	12 Psi
Thickness	0.06” (1.524mm)
Adhesion Strength	Strong
Hardness	50 Shore A

Applications:

The zhonglei brand, originating from China, has developed a cutting-edge Thermal Conduction Material designed to meet the challenging

demands of thermal management across a myriad of applications and scenarios. This innovative Heat Conductive Compound is characterized by its high density of 1.73 G/Cbm and an ultra-thin thickness of 0.06 inches (1.524 mm), ensuring that it can fit into the tightest of spaces without compromising on performance.
One of the most compelling attributes of zhonglei's Thermal Conduction Material is its exceptional chemical resistance, making it an ideal choice for industries where exposure to harsh chemicals is a daily occurrence. This feature guarantees longevity and reliability, even under the most severe conditions. Moreover, the product's operating temperature range is impressively wide, from a frigid -40°C to a scorching 200°C, ensuring its versatility across temperature extremes.
The precise thickness tolerance of ±0.001" (±0.025mm) of zhonglei's Thermal Conduction Material ensures a consistent performance that is essential for applications where precision is paramount. The reliability in maintaining the specified thickness translates to uniform thermal management across the entire surface it is applied to.
Application occasions for this Thermal Conduction Material are extensive. In the electronics industry, it can be used to manage heat in densely packed circuit boards or LED lights, maintaining device integrity and prolonging lifespan. The automotive sector can also benefit from this Heat Conductive Compound in managing the temperatures of batteries in electric vehicles or in the thermal regulation of engine components. Furthermore, in the aerospace field, where materials are subjected to extreme temperature fluctuations, zhonglei's product can offer consistent thermal conduction necessary for critical components.
Scenarios that require strict temperature control, such as in medical device manufacturing or in the creation of high-performance computer systems, are where zhonglei's Thermal Conduction Material truly excels. Its ability to operate effectively across a broad temperature range ensures that sensitive components are protected, and the reliability of high-precision equipment is maintained. The material's thin profile also makes it an excellent choice for applications where space is at a premium, yet efficient heat dissipation is required.

Customization:

At zhonglei, we specialize in providing top-tier **Thermally Conductive Compounds** tailored to meet your specific needs. Our products are crafted with precision in **China** , ensuring that every batch adheres to the highest standards of quality and performance.
Our **Heat Conductive Compound** boasts an impressive **Adhesion Strength** that is classified as **Strong** , ensuring a secure bond for your applications. This makes it an ideal choice for situations where reliability is paramount.
With an exceptional **Dielectric Strength** of **10KV/mm** , our thermally conductive material guarantees excellent insulation properties, providing a safe solution for your electrical and electronic needs.
Designed to withstand a wide range of temperatures, our **Thermal Conductive Adhesive** operates effectively within a temperature range of **-40°C to 125°C** . This makes it versatile enough to handle various environments and conditions.
The **Color** of our compound is a sleek and professional Blue , ensuring that it blends seamlessly into the components it is used with.
Choose zhonglei for your thermally conductive solutions, and experience the perfect blend of performance and reliability.

Support and Services:

Our Thermally Conductive Material products are designed to provide efficient heat dissipation for a variety of applications. To ensure the best performance and longevity of your product, we offer comprehensive technical support and services. Our team of experts is ready to assist you with product selection, installation guidance, troubleshooting, and any technical issues you may encounter.
We provide detailed technical data sheets, application guidelines, and material safety data sheets for all our products to help you understand the specifics of the materials you're working with. Additionally, our support services cover thermal conductivity testing and analysis, ensuring that the material meets your requirements for thermal performance.
If you have questions about customizing products for unique applications, our technical support team is on hand to provide you with the necessary information to make informed decisions. We are committed to helping you optimize the use of our thermally conductive materials in your projects.
For further assistance, please refer to our FAQs, or reach out to our customer service team. We are dedicated to providing you with the highest level of support to ensure the success of your project with our thermally conductive materials.

Packing and Shipping:

Product Packaging: Our Thermally Conductive Material is carefully packaged to ensure its integrity and quality upon arrival. Each unit is enclosed in anti-static packaging to prevent any electrical charge build-up and is then cushioned within high-density foam to protect against impact during transport. The material is sealed within a moisture barrier bag to prevent any environmental contamination and to maintain its thermal properties. The packaging is clearly labeled with handling instructions and material specifications for easy identification and proper use.
Shipping: The packaged Thermally Conductive Material is placed in a sturdy, corrugated cardboard box designed to withstand the rigors of transit. Each box is securely taped and strapped to prevent opening during shipment. We use reputable couriers with experience in handling sensitive materials to ensure your product arrives promptly and without damage. Shipping options include ground, air, and expedited services to meet your delivery needs. Tracking information will be provided so you can monitor the shipment's progress until it safely reaches your destination.

FAQ:

Q1: What types of thermally conductive materials does zhonglei offer?
A1: Zhonglei offers a variety of thermally conductive materials, including thermal pastes, thermal pads, thermal adhesive tapes, and thermally conductive plastics. Each type is designed to suit different applications and provide efficient heat dissipation for electronic components.
Q2: Can zhonglei's thermally conductive materials be used for high-temperature applications?
A2: Yes, many of zhonglei's thermally conductive materials are designed to withstand high temperatures. However, it's essential to check the specific product's technical datasheet for the maximum temperature rating to ensure it meets your application's requirements.
Q3: Are zhonglei's thermally conductive materials electrically insulating?
A3: Zhonglei offers both electrically insulating and electrically conductive thermal materials. The type you'll need depends on your application. Electrically insulating materials are commonly used to prevent electrical shorts, while electrically conductive materials are used when electrical conductivity is required along with thermal conductivity.
Q4: How do I apply zhonglei's thermal paste to my device?
A4: To apply zhonglei's thermal paste, first clean the surfaces that will come into contact with the paste. Apply a small amount of paste to the center of the surface and spread it thinly and evenly over the area with a spatula or a similar tool. The layer should be thin enough to ensure good thermal contact but thick enough to cover the entire surface.
Q5: What is the origin of zhonglei's thermally conductive materials and how does it affect the product quality?

A5: Zhonglei's thermally conductive materials are manufactured in China, with a focus on maintaining high-quality standards in production. The place of origin does not compromise the quality of the products, as zhonglei adheres to strict quality control processes to ensure that each product meets international performance expectations.

Shanghai Zhonglei Electric Material Co., Ltd.

+8615702120966 forwardyu@163.com siliconerubber-product.com

No. 66, Lane 1098, Shengli Road, Qingpu District, Shanghai