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上海中垒电气材料有限公司 Shanghai Zhonghai Electric Material Co. Ltd

# Product Specification

**Basic Information** 

• Place of Origin:

• Brand Name:

Supply Ability:

• Packaging Details:

Thermal Conductivity:	3 W/mK
Material:	Silicone
Tensile Strength:	48 Psi
Operating Temperature     Range:	-40°C To 200°C
Flame Retardant:	Yes
Hardness:	50 Shore A
Thickness Tolerance:	±0.001" (±0.025mm)
<ul> <li>Highlight:</li> </ul>	3.0 W/mK Thermally Conductive Material,

Silicon Free Thermally Conductive Material

China

zhonglei

carton

10000

## **Product Description:**

Thermally Conductive Material

#### Product Overview

Thermally Conductive Material is a high-performance heat conductive substance that is designed to improve the thermal conductivity of materials. It is a type of thermal conductivity material that is widely used in various industrial applications. The material is known for its excellent high temperature resistance and strong adhesion strength, making it an ideal choice for industries that require high thermal conductivity.

Key Features

Thickness: 0.5~10mm

Hardness: 50 Shore A

Operating Temperature Range: -40°C To 200°C

Thermal Conductivity: 3 W/mK

Adhesion Strength: Strong

Advantages

Thermally Conductive Material has several advantages that make it a preferred choice for thermal conduction and heat management applications. Some of the key advantages include:

High Thermal Conductivity: With a thermal conductivity of 3 W/mK, this material is highly effective in improving the thermal conductivity of materials.

Excellent High Temperature Resistance: The material is designed to withstand extreme temperatures ranging from -40°C to 200°C, making it suitable for use in high temperature environments.

Strong Adhesion Strength: The material has a strong adhesion strength, which ensures that it can be securely attached to other materials without any risk of detachment.

Applications

Thermally Conductive Material is widely used in various industrial applications, including:

Electronic Devices: This material is commonly used in electronic devices to improve heat dissipation and prevent overheating.

Automobile Industry: It is used in the manufacturing of car engines and other components that require high thermal conductivity and temperature resistance.

Solar Panels: The material is used in solar panels to improve their efficiency by dissipating excess heat.

Medical Equipment: It is used in medical equipment to prevent overheating and ensure the safe operation of the equipment. Conclusion

Thermally Conductive Material is a versatile and high-performance heat conductive substance that offers excellent thermal conductivity, high temperature resistance, and strong adhesion strength. It is an essential material in various industries and plays a crucial role in improving heat management and preventing overheating. With its numerous advantages and applications, this material is undoubtedly a valuable addition to any industrial setting.

### Features:

Product Name: Thermally Conductive Material

Operating Temperature Range: -40°C To 200°C

Thickness: 0.5~10mm

Adhesion Strength: Strong Thickness Tolerance: ±0.001" (±0.025mm) Heat Conducting Material Thermal Conductive Compound

Thermal Conductivity Material

## **Technical Parameters:**

Technical Parameters for Thermally Conductive Material	Value
Product Name	Thermal Conductive Material
Composition	Silicone
Adhesion Strength	Strong
Thermal Conductivity	3 W/mK
Color	Blue/Red
Thickness Tolerance	±0.001" (±0.025mm)
Application Method	Dispensing or Brushing

Flame Retardant	Yes
Hardness	50 Shore A
Thickness	0.5~10mm
Chemical Resistance	Excellent
Product Type	Thermal Conductive Adhesive, Thermal Conductive Compound, Thermal Conductive Adhesive

## **Applications:**

Thermally Conductive Material - A Revolutionary Solution for High Temperature Applications

Thermally Conductive Material (TCM) is a type of adhesive that is specifically designed for high temperature applications. It is a thermally conductive compound that is used to bond two surfaces together while dissipating heat effectively. TCM is a revolutionary solution for industries that require materials with high thermal conductivity, strong adhesion, and flame retardant properties. Application Method

It can be applied using two methods - Dispensing or Brushing. Dispensing is the process of applying the adhesive using a dispenser or a syringe. This method is ideal for precise and controlled application, making it suitable for small or intricate components. Brushing, on the other hand, involves using a brush to spread the adhesive evenly on the surface. This method is best suited for larger areas or surfaces that are difficult to access with a dispenser.

**Operating Temperature Range** 

One of the key attributes of TCM is its exceptional operating temperature range. It can withstand temperatures as low as -40°C and as high as 200°C, making it suitable for a wide range of applications. This makes TCM an ideal choice for industries such as automotive, aerospace, electronics, and more, where extreme temperatures are common. Adhesion Strenoth

TCM offers strong adhesion, which is crucial for applications that require a reliable and long-lasting bond. The adhesive forms a strong bond between surfaces, ensuring that they stay in place even under extreme conditions. This makes TCM an ideal choice for high temperature applications where other adhesives may fail.

Thickness

TCM is available in a variety of thicknesses, with the most common being 0.06 (1.524mm). This thickness is ideal for most applications, providing a strong bond without adding unnecessary weight or bulk. However, thicker options are also available for applications that require a higher level of thermal conductivity.

Flame Retardant

TCM is formulated to be flame retardant, making it an ideal choice for applications where safety is a top priority. It is designed to resist burning and prevent the spread of fire, providing an added layer of protection for components and equipment. This makes TCM a popular choice in industries such as transportation, where fire safety is crucial.

In conclusion, Thermally Conductive Material is a versatile and innovative solution for high temperature applications. Its unique properties make it an ideal choice for industries that require a strong and reliable adhesive that can withstand extreme temperatures. With its easy application methods, exceptional operating temperature range, strong adhesion, and flame retardant properties, TCM is a game-changer in the world of thermal conductivity materials.

## **Customization:**

Thermally Conductive Material Customization Service

Our Thermally Conductive Material is designed to meet your specific needs and requirements. With our customization service, you can get the perfect solution for your project. Our product is perfect for applications that require efficient heat transfer and management. Key Product Attributes:

Heat Conducting Material: Our Thermally Conductive Material is an excellent heat conductor, allowing for efficient heat transfer. Thermal Conduction Material: With a high thermal conductivity, our material ensures optimal heat dissipation.

Heat Conductive Compound: Our specialized compound is designed to provide superior thermal conductivity for your project. Thickness Tolerance: Our material has a tight thickness tolerance of  $\pm 0.001$ " ( $\pm 0.025$ mm), ensuring precision and consistency in your project.

Hardness: With a hardness of 50 Shore A, our material offers excellent durability and resistance to wear and tear.

Dielectric Strength: Our product has a high dielectric strength of 4.5 KV/mm, making it suitable for various electrical applications. Density: Our material has a density of 1.73 G / Cbm, providing a lightweight option for your project.

Adhesion Strength: Our Thermally Conductive Material has strong adhesion strength, ensuring a secure bond for your project. Choose our Thermally Conductive Material and take advantage of our customization service to get the perfect solution for your project. Contact us now to learn more.

Shanghai Zhonglei Electric Material Co., Ltd.

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