

# PAKCOOL® Thermally Conductive Grease TG-210

#### **Key Features and Benefits**

- Low settlement
- Excellent high and low-temperature resistance, high humidity resistance, superior climate resistance
- Suitable for screen printing, automatic point glue, etc.
- Possesses moderate thixotropic properties

### **Description**

PAKCOOL® TG-210 is a thermally conductive silicon grease, used between high-power electronic components and heat sinks. The product has good heat conductivity, enabling close contact and reducing heat resistance between the electronic component and the heat sink surfaces, thus reducing the temperature of the original electronic components quickly and effectively, prolonging the service life of the electronic components and improving their reliability.

The product has a thixotropic property, will not flow arbitrarily; after applying it to the devices, some pressure is required to let it flow and fill the gap. TG-210 thermal conductive silicone grease will not cross-linked to electronic assembly.

In addition to high thermal conductivity, the product does not produce stress, with skinny thickness and smaller thermal resistance to achieve better thermal conductivity. High stability at -50 to + 200°C with excellent climate resistance, high temperature, and humidity resistance.

# **Applications**

- LED
- High-performance CPUs/GPUs
- Power semiconductors/Power supplies
- Automotive electronics
- Motion control
- Telecommunications
- Computer and peripherals
- Between heat-generating semiconductors or magnetic components and a heat sink

#### **Packaging**

• PAKCOOL®TG-210 thermally conductive grease is offered in a 1Kg, 5Kg and 20Kg barrel or 330mL, 55mL tube depending on the customer's requirements.

#### **Technical Parameters**

Typical Properties	TG-210	Test Methods
Apparent	White grease	
Viscosity (cP)	110,000±30,000	ASTM D2196-15
Thermal Conductivity (W/m·K)	1.0	ASTM D5470
Density (g/ cm <sup>3</sup> )	2.10±0.20	ASTM D792
Weight Loss (% @150°C×3hrs)	≤0.35	GB 33372-2020
Flame Rating	V-0	UL 94
Continuous Use Temperature (°C)	-50 to +200	

Data is available only for guidance and does not as a product specification.

### **Application Instructions**

- If the coated device material is very oil absorbent, it will make the glue state have obvious thickening and drying. Therefore, the surface needs to be treated as non-oil absorption devices or use our single-part adhesive for anti-oil absorption treatment. The judgment of the device material without absorbing oil is generally not changed at normal temperature within 24h.
- Clean the surface of the coating part, scrape or squeeze enough TG-210 to the surface of the device, and then slightly press the two surfaces. If there is any extruded silicone squeezed out, it can be wiped out with a cloth. After use, the container shall be sealed for later operation.

# **Storage and Transportation**

- Non-toxic, non-flammable material, shelf life of 12 months at room temperature. During the storage period, if there is oil exuded, which can be stirred evenly before use. The cartridge products should be storage as flat as possible and store at temperatures below 25°C for no more than 2 month, or at temperatures below 0°C for no more than 6 months. Before use, acclimate the product at 25°C for at least 4 hours to ensure the material reaches the ambient usage temperature.
  - It can be transported as a general liquid chemical.

The data of this specification are obtained under laboratory conditions. However, because of the difference in 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.