

Key Features and Benefits

- High thermal conductivity, low stress, low modulus
- Non-curing, reworkable
- Suitable for automatic dispensing
- Viscous, good thixotropy, non-flowing, excellent adhesion to contact devices, low thermal contact resistance, and good vibration resistance
- Excellent high & low temperatures resistance, weather fastness, aging resistance and electrical insulation

Description

PAKCOOL® TG-510-KJ series extrudable thermally conductive putty strikes a balance between silicone grease and plaster-like consistencies, facilitating easy application through manual spreading, extrusion, or automated dispensing. It is designed to fill the gaps between heat-generating electronic components and heat sinks or casings, ensuring tight contact, reducing thermal resistance, and effectively lowering the temperature of electronic components. This enhances the longevity and reliability of the components.

The product boasts excellent thixotropic properties, preventing dripping during dispensing and unwanted spreading during application. When used for gap filling, even at a thickness of up to 2mm, it maintains good resistance to vibrations.

Applications

- Power modules
- Integrated circuits
- Power supply units
- Automotive electronics
- Laser devices
- Communication devices
- Computers and accessories

Packaging

- Available in 30ml, 55ml, 330ml tube package, 1kg, 5kg, and 20kg barrels, or customized as per customer requirements.

Technical Parameters

Typical Properties	TG-510-KJ	Test Methods
Color	White	Visual
Viscosity (cP)	950,000±350,000	ASTM D2196-15
Thermal Conductivity (W/m·K)	1.0	ASTM D5470
Density (g/cm³)	2.60±0.10	ASTM D792
Weight Loss (%@150°C×3hrs)	≤0.35	GB 33372-2020
UL Flammability Rating	V-0	UL 94
Continuous Use Temperature (°C)	-50 ~ +200	--

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

Application Instructions

- If the material of the device is oil absorbing, it will make the putty become thicker and dry. Therefore, the surface needs to be treated, or use our company's one-part products as primer.
- Clean the application surfaces; by the compression gas squeeze enough product directly on one side of the contact surfaces then close the surfaces with light pressure. Excess material can be wiped up with rag. Cover the container cap before storage.

Storage & Logistics

- 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.
- Can be transported as general liquid chemicals.

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.