

## Key Features and Benefits

- Dispensable thermally conductive gel
- Soft and high compressibility for low stress applications
- Partially cured will not be pumped out
- Excellent high & low temperatures resistance, good weather resistance, excellent chemical and mechanical stability

## Description

PAKCOOL® TG-520-GEL series partially cured dispensable GELs need no mixing or curing and provide superior designed flexibility, viscosity and good contact with the device surfaces. TG-520-GEL has high thermal conductivity to help conduct power devices and heatsink tightly.

PAKCOOL® TG-520-GEL is dispensable for automatic processing. The product has good thixotropy, no dropping when dispensing and no flowing when applying.

PAKCOOL® TG-520-GEL is pre-cured, and easy to operate in the process of electronic assembly when changing or replacing the heat sink is required. The vibration resistance is still good even the thickness is 2 mm. But it is suggested that the thickness should be as thin as possible to achieve lower thermal resistance.

PAKCOOL® TG-520-GEL is electrically insulating, good weather resistance, excellent chemical and mechanical stability. TG-520-GEL can work stably from -50°C to 200°C.

## Applications

- Power semiconductors
- Power supplies
- Motion control
- Telecommunications
- Area where heat needs to be transferred to a frame, chassis, or other type of heat spreader

## Notion

If the customer needs more detail information, please contact our customer department. They will answer and serve you at any time.

## Technical Parameters

| Typical Properties              | TG-520-GEL          | Test Methods  |
|---------------------------------|---------------------|---------------|
| Color                           | White               | Visual        |
| Viscosity (cP)                  | 2,000,000±1,000,000 | ASTM D2196-15 |
| Thermal Conductivity (W/m·K)    | 2.0                 | ASTM D5470    |
| Density (g/cm³)                 | 2.80±0.20           | 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

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