



PAKCOOL® One-part Moisture-cure Thermally Conductive RTV Silicone Adhesive TC-140

Key Features and Benefits

- One-part moisture cure, easy to operate
- Small irritant odor, no corrosion to metal
- Superior high and low temperatures resistance, excellent weatherability
- Superior chemical and mechanical stability
- Good adhesion to most substrate

Description

PAKCOOL® TC-140 is a one-part, room temperature moisture-cured liquid thermal conductive silicone adhesive. It can be cured into an elastomer with higher hardness in a short time. After cure, it is closely attached to the contact surface to reduce thermal resistance, which is beneficial to the heat conduction between the heat source and its surrounding heat sink, mainboard, metal shell and outer shell. This product has advantages of high thermal conductivity, good insulation performance and easy use. These can be widely used for the packaging of manual personal portable computer integrated circuits, microprocessor, etc. This product has good adhesion to metals including copper, aluminum, stainless steel, etc., and the curing form is dealcoholizing type, which will not cause corrosion to metal and nonmetal surfaces.

Applications

- Solar Panels
- Power modules
- Integrated chips
- Automotive Electronics
- Communication devices
- Computers and Accessories

Cure time

Curing time depends on environmental temperature, relative humidity and applied thickness. The thickness ≤ 5 mm is recommended. The time for complete curing after surface drying is approximately 7 days

Technical Parameters

Typical Properties	TC-140	Test Methods
Base Material	Silicone RTV-1	/
Color	White	Visual
State	non-flowable, paste	/
Thermal Conductivity (W/m·K)	4.2	ASTM D5470
Take Free Time (min @25°C 50%)	3	GB/T 13477.5
Density (g/cm ³)	3.17±0.15	ASTM D792
Hardness (Shore A)	90	ASTM D2240
Shear Strength (MPa)	2.2	Aluminum lap shear
Shelf Life (< 20°C)	6 months	/

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

Storage & Logistics

- Available in 330 mL cartridge or customized as per customer requirements
- Store in a cool, dry place out of direct sunlight
- Cartridge containing this product should be placed horizontally to reduce precipitation and separation

Method of use

- Thoroughly clean the substrate with a suitable solvent and allow drying completely before applying
- Wear eye protection and protective gloves as required while handling the product
- Maintain adequate ventilation in the work place at all times

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.