Technical Data Sheet

5299

Two-component addition-type potting compound

Version: 202310

Product description

- Thermal conductive, flame retardant
- 1:1 two-component addition-type potting silicone rubber

Product features

- Good thermal conductivity and flowability
- Both room temperature and heat curing
- Good weather and aging resistance
- Excellent insulation properties
- Flame retardant rating UL94 V-0
- Maintains rubber elasticity from -50°C to 200°C
- RoHS Directive

Typical applications

- Thermal conductive and flame retardant potting of various electronic and electrical components, such as photovoltaic inverters, LED drive power, charging piles, automotive electronics, NEV power and controllers

Directions for use

Preparation: Stir parts A and B well respectively, either manually or mechanically, to avoid change of performance caused by filler settlement.

Mixing: Accurately weigh the two parts as per the weight ratio and put them into a clean container and stir well.

Defoaming: Natural defoaming: The mixed glue is filled into the components and left for 20-30min.

Vacuum defoaming: Pot the components after pumping for 5-10min at a vacuum degree of 0.08-0.1MPa.

Potting: Keep the substrate surface clean and dry. The components should be potted when the glue still has good flowability, otherwise the leveling will be affected.

Curing: The glue is curable both at room temperature and heated. Curing will be accelerated with rising temperature, and heat curing is recommended in winter.

Storage

Store at 0-35°C in a cool and dry place.

Shelf life is 6 months.

Technical parameters

Reference standard[1]	Item	Unit	Value
Properties before curing (25±2°C, 60±5%RH)			
Q/HTXC 2	Appearance (A)	-	Grey fluid
	Appearance (B)	-	White fluid
GB/T2794	Viscosity (A)	mPa·s	2,000-3,500
	Viscosity (B)	mPa·s	2,000-3,000
GB/T13354	Viscosity (A)	g/cm^3	1.62±0.08
	Viscosity (B)	g/cm^3	1.62±0.08
Properties after curing (25±2°C, 60±5%RH, A:B=1:1)			
Q/HTXC 2	Operating time	min	70-90
Q/HTXC 2	Curing time (25°C)	h	2-4
Q/HTXC 2	Curing time (80°C)	min	10-30
GB/T 531	Hardness (Shore 00)	--	40-50
Q/HTXC 2	Dielectric strength	KV/mm	≥20
Q/HTXC 2	Volume resistivity	Ω·cm	$\geq 1.5\times10^{14}$
Q/HTXC 2	Dielectric constant	-	≥2.8
ISO 22007-2	Thermal conductivity	W/(m·K)	0.6-0.7

Note 1: The reference standards are not dated and their latest versions are applicable to this document.

Cautions

Store the product in a sealed container, and keep away from children.

The glue will not cure if exposed to a certain amount of the following chemicals:

- Organic compounds of N, P and S; ionic compounds of Sn, Pb, Hg, As, etc.;
- Compounds containing alkyne and polyvinyl.

To avoid the above problem, try to wipe off the residual rosin when using the glue on the circuit board, and use soldering tin with low lead content.

This product is non-hazardous. Please consult the MSDS of the product for safety information.

Packing specification

Order code:

5299 A9 25 kg/barrel

5299 B9 25 kg/barrel

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