

Technical Data Sheet

RTV bonding and sealing silicone rubber

Version: 202210

4065 (2:1) RTV bonding and sealing silicone rubber is a two-component, thixotropic paste, white, deoxime-type room temperature vulcanized adhesive. It features neutral curing at room temperature and fast deep curing, and the module surface can be cleaned after only about 1~2h. Good adhesion to aluminum, glass, backsheets and junction box plastics. The silicone rubber is resistant to yellowing, and there is no significant yellowing on its surface after aging at 85°C and 85% RH for 1000 hours. The product has excellent conventional mechanical properties and aging mechanical properties, as well as good compatibility with various types of EVA. Additionally, the unique rheological system design ensures the good application performance and deformation resistance of the silicone rubber, with full compliance with the requirements of the EU RoHS Directive.

Typical applications

Sealing aluminum frames of solar photovoltaic modules, bonding and sealing of junction boxes and backsheets, and bonding and fixing of metal brackets and glass on the back of thin film solar cells.

Properties before curing

Part A	Typical value	Range
Appearance W	White, half flowing	
Viscosity, mPa·s (GB/T10247-2008)	250,000	150,000~350,000
Relative density, g/cn	n^3 1.47	1.40~1.55
(GB/T13477.2-2002)		
Part B		
Appearance	White paste	
Viscosity, mPa·s (GB/T10247-2008)	300,000	200,000~400,000
Relative density,g/cm ³	1.46	1.40~1.55
(GB/T13477.2-2002)		

Mixing characteristics

Appearance	White paste	
Mixing weight ratio	A:B=1.75~2.05:1	
Mixing volume ratio	A:B=1.75~2.05:1	
Tack-free time, min (25°C) (GB/T13477.5-2002)	10	5~15
Initial curing time, h (25°C)	0.5	≤2

Properties after curing

Al shear strength, MPa	2.0	≥1.3
(GB/T7124-2008)		
Tensile strength, MPa	2.6	≥2.0

500	≥250
48	≥40
1.0×10^{15}	$\geq 1.0 \times 10^{14}$
22	≥18
	48 1.0×10 ¹⁵

Directions for use

Clean-up: Clean the surface, remove rust, dust, oil, etc., and conduct professional surface treatment if necessary.

Gluing: Open the barrel cover, confirm that the surface of the glue is free of crusts, and immediately install it on the dispensing equipment. According to the operating procedures of the dispensing equipment, apply glue of a certain diameter to the surface to form a continuous line, and complete the work within the operation time without shifting.

Curing: Place the glued components in a ventilated environment to make the glue cured overall.

Storage: Unused part A can be used next time after being placed without affecting its performance. Part B shall be used once or stored away from air/moisture.

Cautions

Keep away from children for storage.

If the skin is accidentally exposed to the product, wipe with a cloth and wash with water before it cures;

If the eyes are accidentally exposed to the product, rinse immediately with water, and seek medical attention in severe cases;

It is recommended to use the product in a well-ventilated place;

Please consult the MSDS of the product for safety information

Packing specification

Part A, 275 kg/drum, 25 kg/barrel. Part B, 275 kg/drum, 25 kg/barrel.

Storage

Store at 8-28°C in a cool and dry place.

Shelf life is 6 months.

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