

Technical Data Sheet

4410

RTV waterproof bonding and sealing adhesive

2023.1

two-component, white, thixotropic paste, modified silicone rubber for bonding and sealing. The product features neutral curing at room temperature and fast deep curing, and the module surface can be cleaned after only about 3~4h. Excellent water vapor barrier property enables it to effectively prevent module failure caused by water vapor penetration. Moreover, the product boasts good sealing, good adhesion to aluminum, glass and other materials, as well as good conventional mechanical properties and aging resistance, so it can effectively protect modules.

Typical application

Waterproof bonding and sealing of aluminum frames and glass of solar photovoltaic modules.

Properties before curing

Component A	Typical value	Range
Appearance	White, half flo	owing
Viscosity, mPa·s	300000	200000~500000
(GB/T10247-2008	3)	
Relative density, g	/cm3 1.38	1.30~1.50
(GB/T13477.2-200	02)	
Component B		
Appearance	White paste	
Viscosity, mPa·s	350000	200000~600000
(GB/T10247-2008	3)	
Relative density, g	/cm3 1.35	1.20~1.40
(GB/T13477.2-200	02)	

Mixing characteristics

Appearance	White paste	
Mixing weight ratio	A:B=1.05:1	
Mixing volume ratio	A:B=1:1	
Tack-free time, min (25°C)	15	5~30
(GB/T13477.5-2002)		
Initial curing time, h (25°C)	4	≥2

Properties after curing

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Shear strength, MPa	1.5	≥1.0
(GB/T7124-2008)		
Tensile strength, MPa	2.4	≥2.0
(GB/T528-2009)		
Elongation at break %	150	≥100
(GB/T528-2009)		
Water vapor transmission	rate, g/cm ² 5	≤10.0
Hardness shore A	50	40~65
(GB/T531.1-2008)		
Volume resistivity, Ω .cm	5.0×10^{14}	$\geq 1.0 \times 10^{14}$
(GB/T 1692-2008)		

Operating temperature, °C

-40~150

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 completed parts 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

Component A: 270kg/drum, 20kg/barrel. Component B: 270kg/drum, 20kg/barrel. 400ml/cartridge

Storage

Store at 8-28°C in a cool and dry place. Shelf life is 6 months.

Note:

The data in this document were obtained under laboratory conditions. Due to differences in operating environment, the user can refer to these data and operating conditions for analysis and testing. Huitian does not guarantee the sale of products or the use of the products under specific working conditions and does not accept any liability for direct, indirect or incidental damage. If users encounter any problems in the process of use, please contact the technical service department of Huitian New Material and all assistance will be provided.

