



Anhui Surmount New Materials Co., Ltd.

SMT Silicone Sealant for Insulating Glass

Product Introduction

SMT868, SMT608, SMT988, etc. are two-part, neutral curing silicone elastic sealants specifically designed for insulating glass assembly. The product formulation provides high modulus and high strength to meet the requirements of insulating glass assembly. In addition to the advantages of ordinary silicone sealants such as weather resistance, high and low temperature resistance, and good adhesion, it also features low gas permeability. During application, it is applied using a dedicated two-part mixing machine. The two components are mixed according to the specified ratio and cure to form an elastomer.

Performance Characteristics

- Two-part system with adjustable curing speed, fast deep-section curing, and uniform internal curing
- Neutral curing, non-corrosive to metals, coated glass, and other building materials
- High modulus and high strength
- Low water vapor and gas permeability
- No irritating or unpleasant odor
- Excellent weather resistance: aging resistance, UV resistance, ozone resistance, water resistance
- Superior high and low temperature resistance: remains flexible without hardening or cracking at -50°C, and does not soften or degrade at 150°C, maintaining good strength and elasticity
- Good compatibility with other neutral silicone sealants

Scope of Application

- Secondary sealing of insulating glass units

Limitations for Use

- Do not use sealant that has exceeded its shelf life
- Do not use as a structural sealant
- Do not apply when the substrate surface temperature is below 5°C or above 40°C
- Do not apply on frosty or damp surfaces
- Do not use in areas subject to continuous water immersion or perpetual dampness
- Avoid contact with rubber materials (such as rubber gaskets, rubber spacers, etc.) to prevent yellowing
- Avoid contact with acidic or alkaline substances (such as exterior wall



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cleaning solutions) to prevent discoloration

Physical Properties (Tested according to GB/T 29755-2013)

Item		Specification
Slump	Vertical, mm	≤3
	Horizontal	No deformation
Tack-free time, h		≤2
Working time, min		≥20
Hardness, Shore A		30-60
Elastic recovery rate, %		≥80
Tensile adhesion	Tensile adhesion strength, MPa	≥0.60
	Elongation at maximum tensile strength, %	≥50
	Bond failure area, %	≤10
Tensile adhesion at defined extension		No failure
Tensile adhesion after water-UV exposure	Tensile adhesion strength, MPa	≥0.45
	Elongation at maximum tensile strength, %	≥40
	Bond failure area, %	≤30
Heat loss, %		≤6.0
Water vapor transmission rate, g/(m ² ·d)		Reported value

Application Instructions

1. Before Application

-Conduct compatibility tests between the sealant and the materials it will contact, as well as adhesion tests with the substrates to be bonded.

2. Application Method

-Apply using a dedicated two-part mixing machine. Recommended mixing ratio: A : B = 10 : 1 (by volume).

-The bonding surface must be clean, dry, and free of any impurities or sealant residues.

-Before the working time expires, remove excess sealant with a knife, dry cloth, or scraper, and smooth the surface.

-Under normal conditions, the tear time is approximately 40 minutes.

-Not suitable for application in humid or frosty environments.



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3. Precautions

- Use within the product's shelf life; expired product must not be used.
- Strictly follow the procedures established during the adhesion test for application.
- During curing, the product releases trace amounts of chemical substances. The work area should be well-ventilated. After curing, the product is non-toxic to the human body.
- Avoid direct contact with skin and eyes. Do not ingest.
- Keep out of reach of children.

Storage and Transportation

This product is classified as non-hazardous. Store in a cool, dry place at a temperature below 27°C. The shelf life is 12 months. It is recommended to use as soon as possible. Note: Component B must be kept sealed, as exposure to air may cause skinning or failure.

Color

Component A is white, Component B is black. After mixing, the color is black.

Packaging

1. Component A: 190 L steel drum (net capacity)
2. Component B: 19 L plastic pail (net capacity)

This instruction manual is for reference purposes only and does not carry any warranty. Please test its suitability beforehand.