

CONSTRUCTION SILICONE

High tensile strength sealant ideally suited for structural bonding and glazing applications

FEATURES

- One part, neutral cure to form an extremely tough elastomeric rubber ensuring a durable, flexible, and watertight bond
- Non-corrosive to glass, metal etc.
- Excellent weatherability and high resistance to ultra-violet radiation, heat and humidity, and ozone
- Excellent resistance to temperature extremes, unaffected performance from -50 °C to +150 °C
- Excellent unprimed adhesion to wide range of substrates
- Good compatibility with other neutral silicone sealants

COLOURS

GB 999 is available in black, gray, and white.

PACKAGING

GB 999 is available in disposable cartridges (net 300ml) and sausages (net 590ml).

GB 999 Silicone Structural Glazing Sealant

BASIC USES

GB 999 Silicone Structural Glazing Sealant is designed for

- Structural bonding and glazing applications for glass curtain walls,
- aluminum curtain walls, terracotta curtain walls and metal structures
- Other construction structural glazing applications

TYPICAL PROPERTIES

These values are not intended for use in preparing specifications

Test Method	Property	Unit	Standard	Result
GB/T 13477 (ISO 7390)	Slump	mm	≤3	0
GB/T 13477 (ISO 8394)	Extrusion rate	s	≤10	1.6
GB/T 13477 (ASTM D 2377)	Tack free time	h	≤3	1.0
GB/T 531.1 (ISO 7619)	Hardness	Shore A	20~60	49
GB 16776 (ASTM C 792)	Heat Aging weight loss	%	≤10	3.6
	cracking		Nil	Nil
	chalking		Nil	Nil
GB/T 13477 (ISO 8339)	Tensile strength	MPa		
	23 °C		≥0.60	1.08
	90 °C		≥0.45	0.90
	-30 °C		≥0.45	1.66
	water immersion		≥0.45	1.12
	water-UV exposure		≥0.45	1.03
adhesion failure	%	≤5.00	0	
	elongation at ultimate tensile strength at 23 °C	%	≥100	220
GB18583-2008	TVOC Content	g/L	/	50

*GB: Chinese National Standard

ASTM: American Society for Testing and Materials

ISO: International Standardization Organization

SPECIFICATIONS

GB 999 is designed to meet or even exceed the requirements of

- Chinese national specification GB16776-2005
Silicone Sealant for Structural Glazing
- Complies with ASTM C 1184

CURE TIME

As exposed to air, GB 999 begins to cure inward from surface. Its tack free time is about 60 minutes, the full and optimal adhesion forms in about 21 days.

STORAGE AND SHELF LIFE

GB 999 should be stored at or below 27°C in original unopened containers. It has a shelf life of 12 months from the date of manufacture.

LIMITATIONS

GB 999 should not be applied:

- To the materials that bleed oils , plasticizers or solvents, such as impregnated wood, oil-based caulks
- In totally confined spaces as sealant requires atmospheric moisture for cure
- To frost laden or damp surfaces
- For continuous water immersion
- When substrate surface temperature below 4°C or over 50°C

HOW TO USE

Surface Preparation

Clean all joints removing all foreign matter and contaminants such as oil, grease, dust, water, frost, old sealants, surface dirt, or glazing compounds and protective coatings.

Application Method

Install back-up materials or joint fillers, setting blocks, spacer shims, and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required for non-porous surfaces, but may be necessary for optimal seal performance of certain porous surfaces.

So adhesion test is always recommended.

Apply GB 999 in a continuous operation using dispensing guns. Before a skin forms, tool the sealant with light pressure to spread the sealant against the backing materials and joint surfaces. Remove masking tape as soon as the bead is tooled.

SAFETY INFORMATION

- GB 999 is a chemical product, not edible, no implantation into body and should be kept away from children.
- Cured silicone rubber can be handled without any risk to health.
- Should uncured silicone sealant contact with eyes, rinse thoroughly with water and seek medical treatment if irritation persists.
- Avoid prolonged exposure of skin to uncured silicone sealant.
- Good ventilation is necessary for work and cure places.

TECHNICAL SERVICES

Complete technical information and literature, adhesion testing and compatibility testing are available from Guibao.

DISCLAIMER

The information presented herein is offered in good faith and is believed to be accurate. However, because conditions and methods of using our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for specific applications.

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