

GB 1092

High Performance Silicone Structural Glazing Sealant

High performance silicone rubber special for structural glazing in high-rise or skyscraper curtainwalling

FEATURES

- Two parts , neutral cure to form an extremely tough elastomeric rubber ensuring a durable, flexible, and watertight bond
- High level of mechanical properties , high tensile strength and extension rate
- Excellent weatherability and high resistance to ultra-violet radiation ,heat and humidity, and ozone
- Excellent stability over temperature range from $-50\text{ }^{\circ}\text{C}$ to $+150\text{ }^{\circ}\text{C}$
- Excellent unprimed adhesion to a wide range of substrates
- Good compatibility with other neutral silicone sealants

COLOURS

Part A(base) of GB 1092 is available in white, part B(curing agent) in black. Black colour after mixing.

PACKAGING

GB 1092 is available in kit: Part A in 200L drums (net 190L), part B in 20L pails (net 19L).

BASIC USES

GB 1092 High Performance Silicone Structural Glazing Sealant is designed for

- Structural sealing and glazing of the curtain wall of high-rise buildings or skyscrapers
- Structural sealing and glazing in large-sized glass panel curtain walls

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 (ASTM D 2377)	Tack free time	h	≤ 3	01
GB/T 13477	Working time (after 20 min.)	s	≤ 10	2.4
GB/T 531.1 (ISO 7619)	Hardness	Shore A	30~60	40
GB 16776 (ASTM C 792)	Heat Aging			
	weight loss	%	≤ 10	3.3
	cracking		Nil	Nil
	chalking		Nil	Nil
GB/T 13477 (ISO 8339)	Tensile strength	MPa		
	at 23 $^{\circ}\text{C}$		≥ 0.6	1.35
	at 90 $^{\circ}\text{C}$		≥ 0.45	1.01
	at -30 $^{\circ}\text{C}$		≥ 0.45	1.85
	water immersion		≥ 0.45	1.21
	water-UV exposure		≥ 0.45	1.18
	adhesion failure	%	≤ 5.0	0
	elongation at ultimate tensile strength at 23 $^{\circ}\text{C}$	%	≥ 100	201

*GB: Chinese National Standard

ASTM: American Society for Testing and Materials

ISO: International Standardization Organization

SPECIFICATIONS

GB1092 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

STORAGE AND SHELF LIFE

GB1092 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

GB1092 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.

Mixing and Dispensing

To obtain the optimal performance of GB 1092, it is recommended that base and curing agent thoroughly mixed using an airless two-part silicone dispensing machine.

GB 1092 should be mixed at a ratio of 9:1~11:1 base to curing agent by volume or 11:1~13:1 base to curing agent by weight.

Lot matching of GB1092 base to curing agent is not required. Before use, it is recommended that curing

agent be fully stirred to ensure the homogeneity of all components.

GB 1092 part B curing agent will react with atmospheric moisture, therefore should not be exposed to air for prolonged periods of time.

Priming

Priming is not usually required when using GB 1092. But it is essential that adhesion is tested prior to use to decide whether to use primer or not.

Masking and Tooling

Areas adjacent to joints may be masked to ensure a neat sealant line. Do not allow mask tape to touch clean surfaces to which the silicone sealant is to adhere. Tooling should be completed in one continuous stroke after sealant application. Masking tape should be removed immediately after tooling.

Equipment Cleaning

When not being used, it is recommended that the dispensing equipment be purged either with the base component or flush with suitable solvent.

SAFETY INFORMATION

- GB 1092 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 intended specific uses.

Manufacturer

*Chengdu Guibao Science and Technology Co., Ltd.
No.16, Xinyuan Road, Hi-tech Zone, Chengdu 610041
P.R.CHINA
Tel: +86 28 8531 1860
Fax: +86 28 8531 8066
E-mail:guibao@cnguibao.com
www.cnguibao.com*