

# GB 992 Silicone

## Structural Glazing Sealant

Two part silicone sealant specially designed for structural glazing

### FEATURES

- Two parts , neutral cure to form an extremely tough elastomeric rubber ensuring a durable, flexible, and watertight bond
- Non-corrosive to metals, coated glass, low-E glass and many other substrates
- Excellent weatherability and high resistance to UV radiation ,heat and humidity, and ozone
- Excellent stability through wide temperature range from  $-50\text{ }^{\circ}\text{C}$  to  $+150\text{ }^{\circ}\text{C}$
- High level of mechanical properties
- Good compatibility with other neutral silicone sealants

### COLOURS

Part A (base) of GB 992 is available in white, part B (curing agent) in black; Black colour after mixing.

### BASIC USES

GB 992 Silicone Structural Glazing Sealant is designed for

- Structural bonding and glazing applications for glass curtain walls, aluminium curtain walls, terracotta curtain walls and metal structures
- Structural secondary seal of insulating glass
- 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	$\leq 3$	0
GB/T 13477 (ASTM D 2377)	Tack free time	h	$\leq 3$	0.8
GB/T 13477	Working time (after 20 min.)	s	$\leq 10$	2.2
GB/T 531.1 (ISO 7619)	Hardness	Shore A	20~60	43
GB 16776 (ASTM C 792)	Heat Aging weight loss	%	$\leq 10$	3.5
	cracking		Nil	Nil
	chalking		Nil	Nil
GB/T 13477 (ISO 8339)	Tensile strength	MPa		
	23 $^{\circ}\text{C}$		$\geq 0.60$	1.13
	90 $^{\circ}\text{C}$		$\geq 0.45$	1.02
	-30 $^{\circ}\text{C}$		$\geq 0.45$	1.62
	water immersion		$\geq 0.45$	1.01
	water-UV exposure		$\geq 0.45$	1.09
	adhesion failure	%	$\leq 5.00$	0
	Elongation at ultimate tensile strength at 23 $^{\circ}\text{C}$	%	$\geq 100$	140
GB 18583-2008	TVOC	g/L	/	47

\*GB: Chinese National Standard

ASTM: American Society for Testing and Materials

ISO: International Standardization Organization

## **PACKAGING**

GB 992 is available in kit: part A in 200L drums (net 190L), part B in 20L pails (net 19L).

## **SPECIFICATIONS**

GB 992 is designed to meet or even exceed the requirements of  
Lot matching of GB 992 base to curing agent is not

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

## **STORAGE AND SHELF LIFE**

GB 992 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 992 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 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 992, it is recommended that base and curing agent thoroughly mixed using an airless two-part silicone dispensing machine.

GB 992 should be mixed at a ratio of 9:1 ~ 11:1 base to

required. Before use, it is recommended that curing agent be fully stirred to ensure the homogeneity of all components.

GB992 part B curing agent will react with atmospheric moisture, therefore should not be exposed to air for prolonged periods of time.

curing agent by volume or 11:1 ~ 13:1 base to curing agent by weight.

### **Priming**

Priming is not usually required when using GB 992. 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 joint 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 992 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 needed 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 applications.

### ***Manufacturer***

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