

# **DOW CORNING® 881 High Strength Glass Silicone Sealant**

#### **FEATURES**

- · Fast cure one-part acetoxy sealant
- · High modulus
- · High and durable adhesion to glass
- Resistant to UV exposure
- Resistant to intermittent water and sea water immersion

#### High modulus acetoxy silicone sealant

#### **APPLICATIONS**

• DOW CORNING 881 High Strength Glass Silicone Sealant is a one-part sealant particularly suitable for bonding glass where a stiff, high strength bond is required, along with a fast cure and high resistance to UV and water contact. Not suitable for Structural Glazing Applications.

#### TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

Test method*	Property	Unit	Value
	Cure system		Acetoxy
	Standard colors		Clear, black
	Application temperature	°C	+5 to +30
		°F	+41 to +86
	Working time	minutes	5
CTM97B	Specific gravity	g/ml	1.1
CTM663A	Cure rate 23°C (73.4°F), 50% R.H.		
	1 day	mm	3.0
	7 days	mm	8.0
	2mm thickness S2 dumb-bells (ISO 37)		
CTM137A	E-Modulus 100%	MPa	0.50
CTM137A	Tensile strength	MPa	>2
СТМ99Е	Hardness (Shore A)		28
	Maximum allowed stress into the sealant is limited at 50.000Pa		

<sup>\*</sup> CTM: Corporate Test Method, copies of CTMs are available on request.

## **HOW TO USE**

#### **Surface preparation**

Ensure that surfaces to be sealed are clean, dry, sound and free from grease, dust and other contaminants which could impair adhesion. Surfaces can be cleaned and degreased by wiping with a suitable solvent, such as DOW CORNING® R40 Universal Cleaner, on a clean oil- and lint-free cloth before application of sealant.

Note: When using any solvent, always provide adequate ventilation. Avoid heat, sparks and open flames. Observe and follow all precautions listed on solvent container label.

#### **Masking**

Areas adjacent to the joints should be masked with tape to prevent contamination of the substrates and to ensure a neat sealant line. Masking tape should be removed immediately after tooling.

#### **Priming**

For specific advice, please refer to the DOW CORNING® Primers' Guide or contact one of Dow Corning's Regional Service Centers for technical assistance.

## Sealant application

The sealant is ready to use. Ensure complete filling of the joint in order to prevent the presence of bubbles. The sealant should have a minimum thickness of 1mm. Tooling a triangular sealant bead inside the gap is highly recommended.

#### **Finishing**

The joint should be tooled within 5 minutes of application to ensure good contact between the sealant and the substrate. Tooling of the sealant also gives a smooth, professional finish.

### Clean-up

Excess sealant may be cleaned off tools and non-porous surfaces whilst in an uncured state using DOW CORNING R40 Universal Cleaner. Care should be taken not to damage plastic or coated surfaces. Alternatively, cured silicone may be removed by peeling, cutting or other mechanical means. Care should be taken not to damage plastic or coated surfaces.

#### JOINT DESIGN

The sealant joint width should be designed to accommodate the movement capability of the sealant. When designing joints using this product, the minimum width should be 6mm. For joints between 6-12mm wide, a seal depth of 6mm is required. For joints above 12mm, a width to depth ratio of 2:1 should be used. In situations where fillet joints are needed, a minimum of 6mm of sealant bite to each substrate is recommended. For joint dimensions greater than 25mm, please contact one of Dow Corning's Regional Service Centres for technical assistance.

Figure 1: Deep joint.

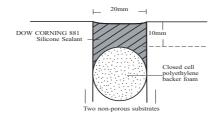


Figure 2: Shallow joint.

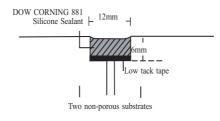
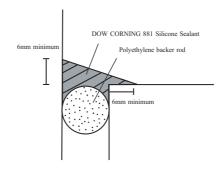


Figure 3: Fillet joint.



#### HANDLING PRECAUTIONS

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

# USABLE LIFE AND STORAGE

When stored in cool, dry conditions below 30°C (86°F) in the original unopened containers, DOW CORNING 881 Silicone Sealant has a usable life of 27 months from the date of production.

#### **PACKAGING**

This product is available in 310ml cartridges packed in boxes of 12, 400ml sausages packed in boxes of 15, 600ml sausages packed in boxes of 20 and 20 liter pails.

#### **LIMITATIONS**

DOW CORNING 881 Silicone Sealant is not recommended for use on porous substrates such as concrete, stone, marble or granite.

Do not use DOW CORNING 881 Silicone Sealant on bituminous substrates, substrates based on natural rubber, chloroprene or EPDM, or on building materials and flexible plastics which might bleed oils, plasticizers or solvents.

Do not use DOW CORNING 881 Silicone Sealant in a totally confined space because the sealant requires atmospheric moisture to cure. Because acetic acid is released during curing, it can corrode mirror silver and sensitive metals such as zinc, copper, brass and lead. DOW CORNING® 817 Mirror Adhesive should be used for this application.

DOW CORNING 881 Silicone Sealant is not recommended for structural glazing or insulated glazing applications.

# IN CASE OF AQUARIUM MANUFACTURING:

DOW CORNING 881 Silicone Sealant enables a high strength bonding up to a glass thickness of max. 10mm. Requirements of DIN 32622 must be considered. Sufficient humidity level is mandatotry for a secure vulcanization process (50% r.H. at +23°).

DOW CORNING 881 Silicone Sealant is not suitable in connection with laminated glass.

Delamination of PVB film may occur up to 20mm when used in contact with the edge of laminated glass.

For sealing or gluing materials other than glass, please ensure the adhesion is sufficient for your specific application. You may contact one of Dow Corning's Regional Service Centers for technical assistance.

DOW CORNING 881 Silicone Sealant is not suitable for food contact applications.

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

# HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

# LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customers' tests to ensure that Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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