



## Technical Data Sheet

# DOWSIL™ 785 N Neutral Sanitary Silicone Sealant

Low modulus neutral silicone sealant

### Features & Benefits

- Neutral cure, low odor
- Low modulus
- Low shrinkage
- Contains fungicide
- Bacteriostatic sealant
- Bright white or translucent finish
- Conforms to ISO 11600-F & G-25LM
- Conforms to EN 15651 for CE Mark
- Good unprimed adhesion on a variety of porous and non-porous substrates
- High elasticity – permanent flexibility
- Fast skin over time and early water resistance after 2 hours
- Non slump
- Resistant to ozone, ultra-violet radiation and temperature extremes

### Applications

- DOWSIL™ 785 N Neutral Sanitary Silicone Sealant is a one-part, neutral curing silicone sealant specifically designed for the sealing of sanitary fittings, including baths, showers, sinks, urinals and ceramic tile joints. It is mildew and fungus resistant and provides good adhesion to a wide variety of porous and non-porous substrates. As a neutral cure silicone, it is also suitable for sealing various metallic surfaces such as aluminum, copper, brass, stainless steel, as well as surfaces such as ceramic, tile, porcelain, plastic, glass and brass.

### Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test	Property	Unit	Result
	Cure system		Neutral
	Application temperature	°C °F	+5 to +40 +41 to +104
CTM 97B	Specific gravity		1.03
CTM 364C	Extrusion rate	g/minute	95
CTM 98B	Skin-over time (23°C or 73°F, 50% R.H.)	minutes	12

1. CTM: Corporate Test Method, copies of CTMs are available on request.

## Typical Properties (Cont.)

Test	Property	Unit	Result
CTM 663A	Cure rate (23°C or 73°F, 50% R.H.)		
	1 day	mm	2.9
	3 days	mm	4.2
<b>2 mm thickness S2 dumb-bells (ISO 37<sup>2</sup>)</b>			
CTM 137A	E-Modulus 100%	MPa	0.3
CTM 137A	Tensile strength	MPa	1.25
CTM 137A	Elongation at break	%	580
<b>12x12x50 mm size T.A. joint (ISO 8339 / DIN 2-8339<sup>3</sup>)</b>			
CTM 677	E-Modulus 100%	MPa	0.3
CTM 677	Tensile strength	MPa	0.53
CTM 677	Elongation at break	%	340
CTM 99E	Hardness (Shore A)		16
ISO 9047	Joint movement capability	%	±25

2. ISO: International Standardization Organization
3. DIN: Deutsche Industrie Norm

### Technical Specifications And Standards

- DOWSIL 785 N Neutral Sanitary Silicone Sealant conforms to ISO 11600-F and G-25LM.
- Conforms to EN 15651 for CE Mark.
- Performance related to mildew and fungus resistance has been tested in accordance with the ISO-Norm 846.

### How To Use

#### Surface Preparation

Ensure that surfaces to be sealed are clean, dry, sound and grease-free. Clean non-porous surfaces with DOWSIL™ R-40 Universal Cleaner or methylated spirits, and dry thoroughly with 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. Use solvent resistant gloves. 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

DOWSIL 785N Neutral Sanitary Silicone Sealant adheres to a variety of porous and non-porous substrates. Primers are not usually required but might be needed for some specific substrates to achieve maximum adherence. Users must carry out their own tests due to the wide variety of substrates available. Please contact Dow for technical assistance.

### Back-Up Materials

When back-up material is required, a closed cell polyethylene backer rod is recommended. Low tack polyethylene tape should be used in joints too shallow to allow the use of a backer rod. Back-up materials provide back pressure and prevent three sided adhesion that limits sealant movement capability.

### 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 by using with DOWSIL R-40 Universal Cleaner. If sealant is misapplied to porous substrates, it should be left until it is just cured and then 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 with DOWSIL 785 N Neutral Sanitary Silicone Sealant, the minimum width should be 6 mm. For joints between 6–12 mm wide, a seal depth of 6 mm is required. For joints above 12 mm wide, a width to depth ratio of 2:1 should be used. In situations where fillet joints are needed, a minimum of 6 mm sealant bite to each substrate is recommended.

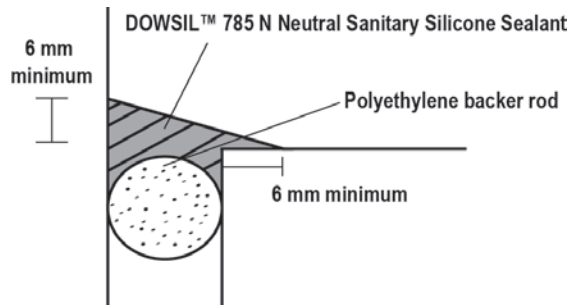


Figure 1: Fillet Joint

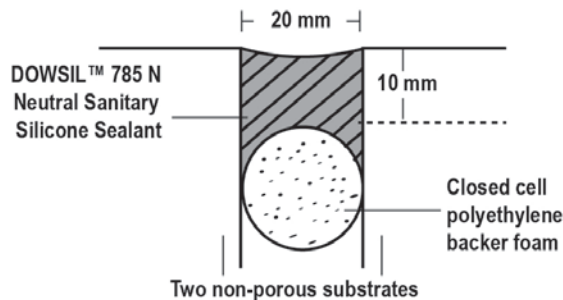


Figure 2: Deep Joint

Handling Precautions	PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT <a href="http://WWW.CONSUMER.DOW.COM">WWW.CONSUMER.DOW.COM</a> , OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.
Usable Life And Storage	When stored in cool, dry conditions below 30°C (86°F) in the original unopened containers, DOWSIL 785 N Neutral Sanitary Silicone Sealant has a usable life of 12 months from the date of production.
Packaging Information	DOWSIL 785 N Neutral Sanitary Silicone Sealant is supplied in 310 ml cartridges packed in boxes of 12.
Limitations	<p>When using DOWSIL 785 N Neutral Sanitary Silicone Sealant on such materials as concrete, stone, marble or granite, be aware that due to the porous nature of these substrates, the product may stain. We advise that stain testing is undertaken on these substrates prior to use. Please contact Dow Technical Services for further assistance.</p> <p>Do not use DOWSIL 785 N Neutral Sanitary 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 DOWSIL 785N Neutral Sanitary Silicone Sealant in a totally confined space because the sealant requires atmospheric moisture to cure.</p> <p>DOWSIL 785 N Neutral Sanitary Silicone Sealant is not recommended for use on submerged joints, or in joints where physical abuse or abrasion is likely to occur.</p> <p>DOWSIL 785 N Neutral Sanitary Silicone Sealant is not suitable for areas where food contact is likely.</p> <p>DOWSIL 785 N Neutral Sanitary Silicone Sealant has not been designed for use as an aquarium sealant.</p> <p>Do DOWSIL 785 N Neutral Sanitary Silicone Sealant is not recommended for structural glazing or insulated glazing applications.</p> <p>This product is neither tested nor represented as suitable for medical or pharmaceutical uses.</p>
Health And Environmental Information	<p>To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.</p> <p>For further information, please see our website, <a href="http://www.consumer.dow.com">www.consumer.dow.com</a> or consult your local Dow representative.</p>

<http://www.consumer.dow.com>

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