Technical Data Sheet

DOWSIL™ 785 Sanitary Acetoxy Silicone

FEATURES & BENEFITS

- Fungus and mildew resistant
- Bacteriostatic sealant
- Gloss finish
- Conforms to ISO 11600-F-20LM
- Resistant to ozone, ultra-violet radiation and temperature extremes

Medium/high modulus acetoxy silicone sealant

APPLICATIONS

- DOWSIL™ 785 Sanitary Acetoxy Silicone is a one-part, silicone sealant specifically designed for the sealing of sanitary fittings, including baths, showers, sinks, urinals and ceramic tile joints. This product is mildew, fungus resistant and bacteriostatic. It is better protected against bacterial growth.

TYPICAL PROPERTIES

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

Test	Property	Unit	Result
	Cure system		Acetoxy
	Application temperature	°C °F	+5 to +40 +41 to +104
CTM[1] 97B	Specific gravity		1.02
CTM 364C	Extrusion rate	g/minute	220
CTM 98B	Skin-over time (23°C or 73°F, 50% R.H.)	minutes	14
CTM 663A, Cure rate (23°C or 73°F, 50% R.H.)			
	1 day	mm	3
	3 days	mm	5
2 mm thickness S2 dumb-bells (ISO[2] 37)			
CTM 137A	E-Modulus 100%	MPa	0.40
CTM 137A	Tensile strength	MPa	1.8
CTM 137A	Elongation at break	%	520
12x12x50 mm size T.A. joint (ISO 8339/DIN[3] 2-8339)			
CTM 677	E-Modulus 100%	MPa	0.4
CTM 677	E-Modulus 60%	MPa	0.35
CTM 677	Tensile strength	MPa	0.59
CTM 677	Elongation at break	%	190
CTM 99E	Hardness (Shore A)		22
ISO 9047	Joint movement capability	%	20

[1]CTM: Corporate Test Method, copies of CTMs are available on request.
[2]ISO: International Standardization Organization
[3]DIN: Deutsche Industrie Norm

TECHNICAL SPECIFICATIONS AND STANDARDS

- DOWSIL 785 Sanitary Acetoxy Silicone conforms to ISO 11600-F-20LM.
- Performance related to mildew and fungus resistance has been tested in accordance with the ISO-Norm 846.
- Bacteriostatic performance has been tested to ISO 22196:2007 for MRSA, E. Coli and Salmonella.

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

No primer is required on most glazed surfaces, including vitreous enamel, ceramics, porcelain, glazed tiles, etc. For acrylic baths, it is recommended that an adhesion test is carried out. Adhesion to plastic and metal surfaces can be improved by using a Dow primer.

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 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 Sanitary Acetoxy Silicone, 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

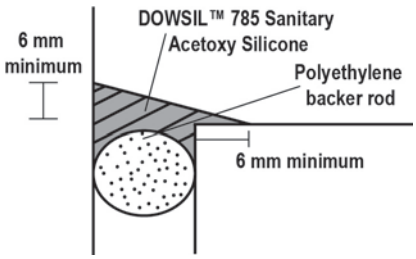
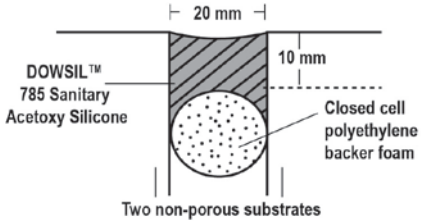


Figure 2: Deep Joint



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 WWW.CONSUMER.DOW.COM, 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 Sanitary Acetoxy Silicone has a usable life of 27 months from the date of production.

PACKAGING INFORMATION

DOWSIL 785 Sanitary Acetoxy Silicone is supplied in 310 ml cartridges packed in boxes of 12, and in 600 ml sausages packed in boxes of 20.

LIMITATIONS

DOWSIL Sanitary Acetoxy Silicone is not recommended for use on porous substrates such as concrete, stone, marble or granite.

UNRESTRICTED – May be shared with anyone
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Do not use DOWSIL 785 Sanitary Acetoxy Silicone 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 785 Sanitary Acetoxy Silicone 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 copper, brass and lead. DOWSIL 785 Sanitary Acetoxy Silicone is not recommended for use on submerged joints, or in joints where physical abuse or abrasion is likely to occur.

DOWSIL 785 Sanitary Acetoxy Silicone is not suitable for areas where food contact is likely.

DOWSIL 785 Sanitary Acetoxy Silicone has not been designed for use as an aquarium sealant.

DOWSIL 785 Sanitary Acetoxy Silicone is not recommended for structural glazing or insulated glazing 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 has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow 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 customer's tests to ensure that our 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.

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