



Technical Data Sheet

DOWSIL™ 786 Silicone Sealant

Silicone rubber sealant for surfaces, showers, tubs, sinks and plumbing fixtures which contains an antimicrobial. Product has been tested against a spectrum of microbes.

Features & Benefits

- Cured sealant is mildew resistant
- Remains permanently flexible without shrinking, cracking, crumbling or drying out
- Resists staining, spotting and color changes
- Retains original design properties even after years of exposure
- Complies with FDA Regulation No. 21 CFR 177.2600

Composition

- One-part, acetoxy-cure silicone rubber sealant
- Contains an antimicrobial

Applications

DOWSIL™ 786 Silicone Sealant is designed to seal nonporous surfaces around showers, tubs, sinks and plumbing fixtures where conditions of high humidity and temperature extremes exist. Typical applications include:

- Sealing around shower-tub enclosures, tubs, sinks, urinals and whirlpools
- Sealing around bathroom fixtures
- Waterproofing rimless sinks
- Ceramic tile grouting

Typical Properties

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

Test ¹	Property	Unit	Result
As Supplied			
ASTM C 679	Tack-free Time at 25°C (77°F), 50% RH	minutes	20
	Tooling Time	minutes	5–11
ASTM C 639	Flow, Sag or Slump		Nil
ASTM C 639	Color		White, translucent white, clear
ASTM C 603	Extrusion Rate	g/min	350
ASTM C 603	Volatile Organic Content (VOC) ²	g/L	22

1. ASTM: American Society for Testing and Materials.

2. Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds.

Typical Properties (Cont.)

Test	Property	Unit	Result
As Cured – 7 Days at 25°C (77°F) and 50% RH			
ASTM D 2240	Durometer Hardness, Shore A	points	25
ASTM D 412	Ultimate Tensile Strength	psi (MPa)	325 (2.1)
ASTM D 624	Tear Strength	ppi (kN/m)	25 (4.4)
ASTM C 794	Peel Strength	pli (kN/m)	20 (3.5)

Description

DOWSIL™ 786 Silicone Sealant is a single-component, ready-to-use silicone rubber sealant. The sealant adheres to many surfaces, such as porcelain, cultured marble, painted areas and glass, without the use of a primer.

Cured DOWSIL™ 786 Silicone Sealant is mildew resistant.

DOWSIL™ 786 Silicone Sealant is available in white, translucent white, and clear.

DOWSIL™ 786 Silicone Sealant is compatible with most substrates. However, adhesion and compatibility should be evaluated in each instance prior to use.

Primers

Primers are not usually required on ceramic, glass and glazed surfaces. It is possible that certain products should be primed for maximum adhesion. A recommended primer for use with metals, Formica and plastics is DOWSIL™ 1200 OS Primer. Refer to the Construction Americas Technical Manual, No. 62-1112, for more specific recommendations. In cases where doubt exists, a sample should be tested before full-scale use.

Approvals/ Specifications

DOWSIL™ 786 Silicone Sealant meets the qualifications of:

- ASTM C 920, Type S, Grade NS, Class 25, Use NT, when tested to glass and aluminum
- FDA Regulation No. 21 CFR 177.2600 (subject to end use compliance with any applicable total extractives limitations)
- NSF ANSI 51 for all food contact types

How to Use

Please consult the Americas Technical Manual, Form No. 62-1112, for detailed information on state-of-the-art application methods and joint design.

Please contact your local Sales Application Engineer for specific advice.

Preparatory Work

Bonding surfaces on both new and remedial jobs must be sound, clean, dry, and free of dust, frost, and soap residue.

Wipe surfaces using clean rag saturated with solvent such as isopropyl alcohol or mineral spirits.

How to Use

Preparatory Work (Cont.)

CAUTION: When using flammable solvents, keep away from heat and open flames. Use only with adequate ventilation. Avoid prolonged or repeated skin contact. Always follow solvent container label instructions.

Do not flood surfaces with more solvent than necessary. Do not clean surfaces with soap, detergent or any water-based cleaner. Make sure that apparently clean surfaces are not covered with a thin film of construction dust.

Priming

Although primers are not usually required on ceramic, glass and glazed surfaces, it is possible that certain products should be primed for maximum adhesion. A bead of the silicone sealant on the substrate material to test adhesion prior to general job use is always recommended.

Masking

If bead lines of exact shapes are required, use masking tape before applying DOWSIL™ 786 Silicone Sealant. Remove immediately after a bead is completed and before a “skin” forms (5–10 minutes).

Application

DOWSIL™ 786 Silicone Sealant can be applied directly from the caulking cartridge with either an air-operated or hand-operated cartridge gun. Do not break the cartridge seal until just before use.

After applying the sealant and a skin has formed, do not disturb the joint for 48 hours. A previously opened cartridge may be reused by removing the cured plug of sealant from the tip

Tooling

Tooling is recommended and, if possible, should be completed in one continuous stroke.

Tool the joints within 10 minutes of application. Remove masking tape before a surface skin begins to form. Once a surface skin begins to form, it will be torn off when the tape is removed, leaving a rough surface.

Clean-up

Excess sealant should be cleaned off tools and surfaces while it is in the uncured state, but using a commercial solvent such as isopropyl alcohol or mineral spirits.

Maintenance

Cured sealant can be cleaned with soap and water. If sealant becomes damaged, replace damaged portion.

Availability

DOWSIL™ 786 Silicone Sealant is marketed throughout the Americas through construction distributors and building supply outlets.

**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 DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

**Usable Life and
Storage**

Product should be stored at or below 32°C (90°F) in original, unopened containers. Product should be used prior to the use by date on packaging.

Limitations

DOWSIL™ 786 Silicone Sealant is not recommended for use in applications involving:

- Structural silicone glazing
- Floor joints where physical abuse or abrasion is likely to be encountered
- Prolonged water immersion
- Cementous surfaces, such as masonry
- Building materials that might bleed oils or solvents – materials such as impregnated wood, partially vulcanized rubber gaskets or tapes or adhesives
- Totally confined spaces, because the sealant requires atmospheric moisture for cure
- Surfaces sensitive to corrosion by acetic acid vapors (a byproduct of sealant cure)
- A surface that is intended to be painted

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

**Shipping
Limitations**

None.

**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, dow.com or consult your local Dow representative.

**Disposal
Considerations**

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

**Product
Stewardship**

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com

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