



Technical Data Sheet

DOWSIL™ 989 SL Sealant

DOWSIL™ 989 SL Sealant is intended for use as glass/metal coating.

Features & Benefits

- Fast curing time
- Odorless and non-corrosive cure
- Outstanding resistance to ozone and ultraviolet (UV) radiation
- Stable viscosity for A and B components, no heating required
- Excellent temperature stability: -50°C (-58°F) to 150°C (302°F)
- Excellent adhesion on glass and anodized aluminum
- Low viscous material
- Excellent spreading
- No tooling required
- Long service life
- Lot matching of base and curing agent not required
- Can be provided in custom color
- Self-leveling characteristic
- UV stability
- High opacity
- Suitable for manual or automated processes
- High color durability

Applications

- DOWSIL™ 989 SL Sealant is a two-part neutral silicone. It has been designed to coat glass or other substrates with a thin layer of silicone. It is very fast curing, as it is a two-part product and can be provided in different colors. The high performance features incorporated into this product make it specially suitable for coating application with a very high level of UV exposure. Due to its high flowability, it can be applied quickly, homogenously and quite smoothly so that a tooling is not required. Typical applications: glass spandrels, canopy glass, interior and exterior balustrades and even in deep cavity designs, it provides benefits due to its flowability and fast curing properties.

Typical Properties

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

Test ¹	Property	Unit	Result
Base			
	Color and consistency		White, liquid
ASTM1475	Specific gravity		1.23
CTM50	Viscosity (0.89s-1)	Pa.s	29
CTM50	Viscosity (60s-1)	Pa.s	13
Curing Agent			
	Color and consistency		Color range ²
ASTM1475	Specific gravity		0.98
CTM50	Viscosity (0.89s-1)	Pa.s	1.2
CTM50	Viscosity (60s-1)	Pa.s	0.5
As mixed (10:1 by weight)			
ASTM1475	Specific gravity		1.20
CTM50	Viscosity (0.89s-1)	Pa.s	29
CTM50	Viscosity (60s-1)	Pa.s	16
CTM92	Snap time (25°C/77°F 50% RH)	min	15
CTM95	Tack free time (25°C/77°F 50% RH)	min	40
	Non flow time (25°C/77°F 50% RH)	min	11
CTM1162	Flowability	mm	90
EN1279-6	Durometer, hardness, shore A		25
ISO37	Tensile strength	MPa	0.7
ISO37	Elongation	%	140
ISO8339	Tensile strength	MPa	0.30
ISO8339	Elongation	%	45

1. ASTM: American Standards for Testing and Materials.
CTM: Corporate Test Method (Dow)
EN: European Norm.
ISO: International Standards Organization.
2. All gray shades form white to black + other colors on request.

Description

DOWSIL™ 989 SL Sealant is a two-part, neutral curing silicone formulation specifically developed as a coating on glass or other substrates, and showing good flowability and opacity. It cures at room temperature giving off a small amount of alcohol.

For further information please contact our Technical services department.

How to Use

Mixing and Dispensing Instructions

DOWSIL™ 989 SL Sealant has good unprimed adhesion to a wide range of building substrates.

DOWSIL™ 989 SL Sealant should be mixed in a ratio of 10:1 base to curing agent by weight. At this mix ratio, the sealant typically exhibits a working time of 10 minutes (25°C/77°F 50% RH) and allows units to be handled within four hours.

Due to its inherent chemistry, DOWSIL™ 989 SL Sealant Curing Agent can exhibit liquid separation over time. Re-homogenization is needed prior use to ensure a good and constant performance in the application.

Mixing & Dispensing

To obtain the ultimate physical properties, it is recommended that the base and curing agent are thoroughly mixed using an airless mixing system found on most existing commercially available two-part silicone dispensing machines.

When not being used it is recommended that the dispensing equipment be purged either with the uncatalyzed base, or flushed with a suitable solvent such as DOWSIL™ 3522 Cleaning Solvent Concentrated. If cured sealant has built up inside the equipment it is recommended to flush the equipment for the appropriate time with DOWSIL™ 3522 Cleaning Solvent Concentrated. This solvent dissolves cured silicone sealant and provides optimum cleaning performance.

Preparatory Work

Surface must be free from grease, oil, dust, water, frost, surface dirt, old sealants, or glazing compounds and protective coatings.

Metal, glass and plastic surfaces should be cleaned by mechanical or solvent procedures to avoid any residues as mentioned above negatively impacting adhesion build up. Where used, solvent should be wiped on and off with clean, oil- and lint-free cloths.

Priming

Priming is not usually required when using DOWSIL™ 989 SL Sealant. However, it is essential that adhesion is tested prior to use. Specific primer recommendations will be made by Dow Technical Services Department on a project basis. Please contact Dow for further information. The sealant is compatible with most of DOWSIL™ neutral curing construction sealants.

Lot matching of DOWSIL™ 989 SL Sealant Base and DOWSIL™ 989 SL Sealant Curing Agent is not required. Before use it is recommended that the curing agent be stirred to ensure homogeneity of all components. DOWSIL™ 989 SL Sealant Curing Agent will react with atmospheric moisture and therefore should not be exposed to air for prolonged periods of time.

Please contact our Technical Services Department for more information.

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

When stored at or below 30°C (86°F), DOWSIL™ 989 SL Sealant Base has a usable life of 18 months from the date of production.

When stored at or below 30°C (86°F), DOWSIL™ 989 SL Sealant Catalyst has a usable life of 12 months from the date of production.

Limitations

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, 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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