



Technical Data Sheet

DOWSIL™ InstantGlaze Window Assembly Sealant

Reactive hot-melt silicone for automated backbedding applications

Features & Benefits

- Instant green strength
- Meets ASTM C 793 weather resistance
- Low VOC (VOC exempt in CA)
- Neutral cure
- Adheres to most common window substrates
- Open time up to 15 minutes
- Pot life up to 24 hours at $\leq 250^{\circ}\text{F}$ ($\leq 121^{\circ}\text{C}$)
- Excellent clarity
- Service temperatures from -58 to 300°F (-50 to 150°C)
- Reduces silicone contamination and cleanup
- Can be used with standard XY glazing equipment and pumps
- Instant green strength delivers improved productivity in window assembly
- Long open time, pot life, and moderate application temperature (250°F [121°C]) offer a user-friendly application
- Unique physical properties minimize contamination of window components during assembly

Composition

- Neutral (moisture) cure, 100 percent silicone, reactive hot-melt sealant

Applications

DOWSIL™ InstantGlaze Window Assembly Sealant is designed for use as a backbedding sealant in the assembly of windows and doors. It is used with high-speed XY glazing equipment to improve manufacturing productivity and window performance. It can be used on most common window materials (wood, PVC, aluminum, fiberglass) for standard and impact-resistant glazing. DOWSIL™ InstantGlaze Window Assembly Sealant is also compatible with most common insulating glass sealants.

Typical Properties

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

Test	Property	Unit	Result
CTM ¹ 0719	Viscosity at 248°F (120°C)	poise	2100
CTM 0086	Nonvolatile content	percent	> 98.5
CTM 0243	Open time ²	minutes	15
CTM 0243	Green strength at 15 minutes	psi	8
CTM 0243	Green strength at 60 minutes	Psi	10
	Cure time ³ , 1/8" bead, RT @ 50% RH	days	2
ASTM ⁴ C 661	Durometer, Shore A	points	60
ASTM D 412	Tensile strength	psi	350
ASTM D 412	Elongation	percent	1000
ASTM D 412	Modulus at 50 percent elongation	psi	75
ASTM C 719	Movement capability	percent	±50
ASTM C 794	Peel strength		
	to Float glass	pli	50
	to Mill-finished aluminum	pli	45
	to PVC	pli	25
	to Treated wood	pli	20
	to Fiberglass	pli	45
	to Kynar-coated aluminum	pli	50
ASTM C 711	Low-temperature flexibility	°F (°C)	-58 (-50)
ASTM C 793	Weathering resistance		Excellent
CTM 0044	Specific gravity, uncured		1.10
ASTM C 711	Service temperature range	°F (°C)	-58 to 300 (-50 to 150)

1. CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances. Copies of CTMs are available upon request.
2. To ensure adhesion.
3. Full cure with a manufactured unit depends on joint design.
4. ASTM – American Society for Testing and Materials.

Description

DOWSIL™ InstantGlaze Window Assembly Sealant is a 100 percent silicone, neutral-cure sealant formulated to meet the demanding requirements of a backbedding sealant for the high-speed manufacturing of windows and doors. DOWSIL™ InstantGlaze Window Assembly Sealant delivers instant green strength to offer productivity improvements in backbedding applications. Windows made with DOWSIL™ InstantGlaze Window Assembly Sealant can be immediately handled without the risk of compromising the integrity of the seal or distorting of the sash.

DOWSIL™ InstantGlaze Window Assembly Sealant is available in clear, gray, and black.

Approvals/ Specifications

AAMA 805.2-94, Group A

How to Use

Preparation

Surfaces should be clean and dry before sealant application.

Application

DOWSIL™ InstantGlaze Window Assembly Sealant is applied from 5 gallon pails or 55 gallon drums with a platen-type hot-melt pump. Application temperature is typically 250°F (120°C). When the melt temperature has been reached, application with automated or hand-assisted glazing equipment can begin.

After applying the sealant to the sash, the glass unit should be installed within 15 minutes to ensure adhesion. Once applied, this product reacts with atmospheric moisture to form a weather-resistant, flexible silicone sealant. Exposure of opened containers with air should be minimized.

Usable Life and Storage

When stored at or below 90°F (32°C) in original unopened containers, DOWSIL™ InstantGlaze Window Assembly Sealant has a usable life of 18 months from the date of manufacture. Refer to product packaging for "Use By Date."

Packaging

DOWSIL™ InstantGlaze Window Assembly Sealant is available in 5 gal (20 L) pails containing 40 lb (18 kg) and 55 gal (200 L) drums containing 452 lb (205 kg).

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

Material is applied at 250°F (121°C). Use common personal protective equipment to prevent contacting the hot material with skin or eyes.

Limitations

DOWSIL™ InstantGlaze Window Assembly Sealant is not intended for use:

- In spaces totally confined from atmospheric moisture during cure
- In continuous water immersion
- In below-grade applications
- In structural glazing applications
- As an insulating glass sealant
- On surfaces that require painting or staining
- On surfaces that might bleed oils, plasticizers, or solvents
- On frost-laden or wet surfaces
- When movement capability greater than ±50 percent is required

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

Avoid prolonged exposure to citrus containing cleaners, solvents and solvent-based cleaners.

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, 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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