



Technical Data Sheet

DOWSIL™ InstantGlaze III Assembly Adhesive

Neutral-cure hot-melt silicone for automated assembling of windows

Features & Benefits

- Instant green strength
- Exhibits silicone weather resistance (meets ASTM C 793 weather resistance)
- Low VOC
- Neutral cure
- Adheres to most common window substrates
- Open time up to 15 minutes
- Pot life up to 24 hours at 120°C
- Excellent clarity
- Service temperatures from -30 to 150°C (-23 to 300°F)
- Reduces silicone contamination and cleanup
- Easy to deglaze
- Can be used with high speed robots and pumps or standard XY glazing equipment
- Instant green strength delivers improved productivity in window assembly
- Long open time, pot life and moderate application temperature (93 to 130°C [200 to 265°F]) offer a user-friendly application
- Unique physical properties minimize contamination of window components during assembly

Composition

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

Applications

- DOWSIL™ InstantGlaze III Assembly Adhesive is designed for use as productivity enhancer in the assembly of windows and doors. It is used with various types of high-speed automatic equipment (robots, XY tables, etc.) to improve manufacturing productivity and window performance. It can be used on most common window materials (wood, PVC, aluminum, fiberglass) without the need for any primer. DOWSIL™ InstantGlaze III Assembly Adhesive is also compatible with most common insulating glass sealants.

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DOWSIL™ InstantGlaze III Assembly Adhesive

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Typical Properties

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

Test ¹	Property	Unit	Result
CTM 0719	Viscosity at 120°C (248°F)	Pa sec	120
CTM 0044	Specific gravity, uncured		1.12
CTM 0243	Open time	minutes	15
CTM 0243	Green Strength at 15 minutes	MPa (psi)	0.03 (5)
CTM 0243	Green Strength at 60 minutes	MPa (psi)	0.04 (6)
ASTM C661	Durometer, Shore A	points	33
ASTM D412	Tensile strength	MPa (psi)	4.8 (700)
ASTM D412	Elongation	percent	949
ASTM D412	Modulus at 50% elongation	MPa (psi)	0.8 (122)
ASTM C719	Movement capability	percent	±50
ASTM C794	Peel strength		
	to float glass	kN/m (pli)	8.4 (46)
	to mill-finished aluminum	kN/m (pli)	10 (57)
	to PVC	kN/m (pli)	7.3 (40)
	to treated wood	kN/m (pli)	7.1 (39)
	to fiberglass	kN/m (pli)	10 (57)
ASTM C793	Low-temperature flexibility	°C	-30
		°F	-23
ASTM C793	Weathering resistance		No cracks
ASTM C711	Service temperature range	°C	-30 to 150
		°F	-23 to 300

1. CTM: (Corporate Test Methods) correspond to standard ASTM tests in most instances. Copies of CTMs are available upon request.
ASTM: American Society for Testing and Materials.

Description

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

DOWSIL™ InstantGlaze III Assembly Adhesive is a clear transparent color formulation.

Approvals/ Specifications

AAMA 805.2-94, group A ISO 11600 (25% mvt capability) CTBA L114, Norm XP P23-310e

How To Use

Preparation

Surfaces should be clean and dry before sealant application. No primers are needed with DOWSIL™ InstantGlaze III Assembly Adhesive.

Application

DOWSIL™ InstantGlaze III Assembly Adhesive is applied from 20 liter or 205 kg drums with a platen-type hot-melt pump. Application temperature is typically 120°C (250°F). When the melt temperature has been reached, application with automated or hand- assisted glazing equipment can begin.

Once applied to the sash, the glass should be installed within 15 minutes. DOWSIL™ InstantGlaze III Assembly Adhesive can be applied on the sash or directly on the glass. 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.

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 120°C (250°F). Use common personal protective equipment to prevent contacting the hot material with skin or eyes.

Usable Life and Storage

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

Packaging Information

This product is available in 20 liter (18 kg) pails and 200 liter (205 kg) drums.

Limitations

This product 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 surface that might bleed oils, plasticizers or solvents
- On frost-laden or wet surfaces

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

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

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