



DOWSIL™ 3364 Warm Edge IG Sealant

DOWSIL™ 3364 Warm Edge IG Sealant is a high modulus, two-part silicone secondary sealant with low thermal conductivity for use in energy efficient Insulated Glass Units.

Features & Benefits

- Helps produce thermally efficient IG units for high performance buildings
- 45% lower thermal conductivity compared to conventional sealants
- Reduced condensation risk and higher surface temperatures up to 1°C, resulting in increased occupant comfort
- High modulus which limits the stress on the primary sealant and makes it particularly suited for gas-filled insulating glass units
- Used in IG units specified for all structural glazing applications including ETAG 002
- Suitable for air and gas-filled double and triple glazed units according to EN1279 part 2 and 3.
- Tested according to EN 1279 part 4 and 6
- Outstanding adhesion to glass and a wide range of warm edge spacers
- High temperature stability: -50°C to +150°C
- Outstanding resistance to ozone and ultraviolet (UV) radiation

Composition

- 2-component silicone sealant
- Neutral curing, non-corrosive

Applications

- Secondary sealant for gas-filled and air-filled insulating glass in commercial and residential glazing
- Insulating glass used for structural glazing and bonding
- High performance IG systems with warm edge spacer
- High performance façade systems, such as toggle systems and unitized systems

Typical Properties

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

Test	Property	Unit	Result
DOWSIL™ 3364 Warm Edge IG Sealant Base: as supplied			
	Color		White
	Consistency		Viscous paste
	Specific gravity	g/ml	0.94

Typical Properties (Cont.)

Test	Property	Unit	Result
DOWSIL™ 3364 Warm Edge IG Sealant Catalyst: as supplied			
	Color		Black
	Consistency		Viscous paste
	Viscosity (100s ⁻¹)	Pa.s	200
	Specific gravity	g/ml	1.03
DOWSIL™ 3364 Warm Edge IG Sealant Catalyst: as mixed			
	Color		Black
	Consistency		Non-slump paste
	Working time (+23°C, 50% r.h.)	minutes	10
	Snap time (+23°C, 50% r.h.)	minutes	15
	Specific gravity	g/ml	0.95
	Corrosiveness		none
ISO ¹ 8339	Tensile strength at break	N/mm ²	1.13
ISO 868	Durometer hardness, Shore A		41
ETAG ² 002	Design stress in tension (dynamic)	MPa	0.14
ETAG 002	Design stress in shear (static)	MPa	0.010
EN ³ 1279/4	Water vapor permeability (2.0 mm film)	g/(m ² /24h)	12.2
EN 1279/4	Gas permeability (2.0 mm film)	g/(m ² h)	1.01
EN 12667	Thermal conductivity(λ)	W/mK	0.186
EN ISO10456:2007	Declared Thermal conductivity (λ_D)	W/mK	0.19

1. ISO: International Standards Organization
2. ETAG: European Technical Agreement Guidelines
3. EN: European Norm

Description

DOWSIL™ 3364 Warm Edge IG Sealant is a high modulus two-part silicone secondary sealant for gas-filled insulating glass in structural glass facades with enhanced energy efficiency and lower condensation risk.

The sealant thermal conductivity determined according EN 12667 is $\lambda = 0,186$ W/m K. The declared thermal conductivity according EN ISO 10456:2007 + AC:2009 to be used in thermal modelling for assessment of the thermal performance is $\lambda_D = 0,19$ W/m K.

In addition to its low thermal conductivity, DOWSIL™ 3364 Warm Edge IG Sealant provides high design strength and adhesion to glass and spacers to enable long-term performance.

Description (Cont.)

DOWSIL™ 3364 Warm Edge IG Sealant can be used in existing IGU manufacturing without significant design or material changes. DOWSIL™ 3364 Warm Edge IG Sealant can be used among others, in toggle systems and triple glazed IGUs and is most thermally efficient when used in conjunction with warm edge spacers. It contributes toward providing a warm edge for insulating glass units for better energy performance of the façade. These benefits are key contributors to overall energy efficiency and living comfort.

DOWSIL™ 3364 Warm Edge IG Sealant is UV resistant, provides long-term durability and has excellent adhesion to glass and insulating glass unit components.

Technical Specifications

DOWSIL™ 3364 Warm Edge IG Sealant is suitable for use as a secondary seal in gas-filled insulating glass units and double glazed IG's.

DOWSIL™ 3364 Warm Edge IG Sealant is tested according to ETAG002, EN 1279 parts 4 and 6 and meets requirements of EN1279 parts 2 and 3.

Mixing Instructions

DOWSIL™ 3364 Warm Edge IG Sealant should be mixed in a ratio of 10:1 base to catalyst (curing agent) by weight. At this mix ratio, the sealant typically exhibits a working time of 10 minutes and allows units to be handled within two hours. Slight variations in mixing ratio can be tolerated, but these should not exceed 11:1 to 9:1 by weight to ensure minimum properties are obtained.

The sealant is compatible with most DOWSIL™ neutral curing sealants. Please contact our Technical Services Department for more information.

To achieve the best mechanical properties of DOWSIL™ 3364 Warm Edge IG Sealant, it is recommended that the base and curing agent are thoroughly mixed using hydraulic pumps. Pump pressure should not exceed 250 bars as higher pressure would have a slight impact on final thermal performance.

DOWSIL™ 3364 Warm Edge IG Sealant can be used in manual or fully automated applications.

Dispensing equipment can be purged using either with the pure base or flushed with a suitable solvent such as DOWSIL™ 3522 Concentrated Cleaning Solvent. If cured sealant has built up inside the equipment, it is recommended that the equipment be flushed for the appropriate time with DOWSIL™ 3522 Concentrated Cleaning Solvent. This solvent dissolves cured silicone sealant and provides optimum cleaning performance.

Technical Service

Dow provides comprehensive technical service as part of customer support to ensure the optimal performance of your insulated glass design. Please also consider our Technical Manual for Insulating Glass for additional technical and application information. This includes dispensing equipment recommendations, as well as sealant compatibility testing with all your chosen insulated glass unit components. For structural glazing applications, special unit design should be reviewed on a project basis by Dow technical service staff.

Consult Dow Technical Services department for further advice on specific applications.

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.

Usable Life and Storage

When stored at or below 30°C, DOWSIL™ 3364 Warm Edge IG Sealant Catalyst (curing agent) and DOWSIL™ 3364 Warm Edge IG Sealant Base have a usable life of 12 months from the date of production.

Packaging Information

Lot matching of base and curing agent is not required.

DOWSIL™ 3364 Warm Edge IG Sealant Catalyst is available in 25 kg pails.
DOWSIL™ 3364 Warm Edge IG Sealant Base is available in 175 kg drums.

Limitations

This sealant cannot be used for structural glazing of glass units onto a metal frame. DOWSIL™ 993 Structural Glazing Sealant is the recommended product for that application. Please contact Dow to obtain the proper glazing recommendations when using coated glass.

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.

consumer.dow.com

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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Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

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