



Technical Data Sheet

DOWSIL™ 335 Butyl Sealant Black

DOWSIL™ 335 Butyl Sealant Black is a primary seal for insulating glass in commercial and residential applications.

Features & Benefits

- Temperature resistance of DOWSIL™ 335 Butyl Sealant Black up to 85°C with no evidence of trickles or flows within the insulating glass¹.
- Solvent-free², one-part primary sealant.
- Good physical adhesion to glass and various warm edge and standard spacers.
- Compatible with all Dow façade silicones.
- DOWSIL™ 335 Butyl Sealant Black is suitable as a primary seal in gas-filled insulating glass units and meets the requirements according to EN 1279.
- Suitable for gas-filled triple and double glazed IG. As valid for any other technology, a proper application and fabrication of the insulating glass unit is required.

¹Beyond the performance of the butyl sealant, at these temperatures, the functionality and integrity of the insulating glass must be validated through specific tests carried out by accredited/notified laboratories.

²DOWSIL™ 335 Butyl Sealant Black is solvent free, being manufactured without added solvent.

Composition

- Polyisobutylene
- Solvent free and non-reactive
- Solid compound - temperature applied with conventional heated butylizers

Applications

- Butyl sealant for primary sealing of insulating glass units, double or triple glazed
- IG designs with warm edge spacers and standard spacers made of plastics, metals or combinations
- Insulating glass units in residential windows and commercial facades

Typical Properties

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

Test	Property	Unit	Result
	Chemical base		Polyisobutylene, non-reactive, solvent-free
	Colors		Black
	Consistency		Solid compound, non-slump

Typical Properties (Cont.)

Test ¹	Property	Unit	Result
EN ISO 1183	Specific gravity DOWSIL™ 335 Butyl Sealant Black	g/ml	1.24
	Corrosiveness		Non-corrosive
	Temperature application	°C	125–145
Acc. to EN1279-4 (2018) Test Method	Gas permeability DOWSIL™ 335 Butyl Sealant Black	$\text{g} \cdot \text{m}^{-2} \cdot \text{d}^{-1}$	0.0117
	Gas permeability DOWSIL™ 335 Butyl Sealant Black	$\text{g} \cdot \text{m}^{-2} \cdot \text{h}^{-1}$	0.00049
	Water vapor permeability 2.0 mm film	$\text{g}/\text{m}^2/24\text{h}$	0.05
	Volatile content	%	≤ 0.001
ISO 1133B	Melting rate (MVR, meltflow modular) for DOWSIL™ 335 Butyl Sealant Black	$\text{cm}^3/10 \text{ min}$	8–10.5
ISO 2137	Penetration	0.1mm	min 25

1. ISO: International Standardization Organization
EN: European Norm

Description

DOWSIL™ 335 Butyl Sealant Black is a one-part heat applied Polyisobutylene specifically designed for high performing gas-filled multiple pane insulating glass in commercial and residential applications. It is solvent-free and odorless.

Technical Specification

DOWSIL™ 335 Butyl Sealant Black is a primary seal for gas-filled insulating glass (IG) units and meets the requirements according to EN 1279 part 4 and 6. It is suitable for gas-filled triple and double glazed IG. As valid for any other technology, a proper application of the butyl and fabrication of the insulating glass unit is required. Please contact Dow technical service specialists for additional information.

DOWSIL™ 335 Butyl Sealant Black has been tested according to EN1279 Part 4:2018 test methods for:

- Thermogravimetric analysis
- Density (according EN ISO 1183-1:2012)
- Gas permeation
- Water vapor transmission rate

Application Instructions

DOWSIL™ 335 Butyl Sealant Black is supplied ready to use. It is applied with a heated conventional butylizer at temperatures of 125°C up to 145°C. The optimized volume output can be set up on the butyl extruder by adjusting pressure and temperature. This should be determined in application trials prior to application. Temperatures can be adjusted within the mentioned temperature range.

DOWSIL™ 335 Butyl Sealant Black is directly applied to the spacer and offers excellent physical adhesion to glass and most commonly used warm edge and other standard spacers made of stainless steel, plastics, galvanized steel or combinations.

Application Instructions (Cont.)

Spacer surfaces must be dry and free from solvents, oils, dust or grease. Condensation on the spacer surface must be avoided. Please contact the spacer supplier for further information.

DOWSIL™ 335 Butyl Sealant Black reaches its final and highest strength after the pressing process and has a very low gas and air permeability and therefore acts as primary barrier in an insulating glass edge design.

The sealant is compatible with all DOWSIL™ neutral curing insulating glass sealants, structural glazing sealants and façade weather sealing sealants. All other sealants (solvent free or extended with mineral oil and rubber profiles) in direct and/or indirect contact, have to be approved by Dow before using them in combination with DOWSIL™ 335 Butyl Sealant.

Please contact our Technical Services Department for more information and refer to the DOWSIL™ 335 Butyl Sealant Processing Guidelines, Form Number 62-2157.

Technical Service

Dow offers comprehensive technical service as part of customer support to help ensure the exceptional performance of your insulated glass design. 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:

EHS inquiries: europa.ehs@dow.com

Reach inquiries: reachsupport@dow.com

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 between +10°C to +30°C, DOWSIL™ 335 Butyl Sealant Black is ready to use. If stored at lower or higher temperatures, volume output is impacted and there is a high risk of condensation when stored at lower temperatures, although DOWSIL™ 335 Butyl Sealant Black is resistant against frost. DOWSIL™ 335 Butyl Sealant Black has a shelf life of 36 months from date of production provided it is properly stored in its original packaging.

Packaging Information

DOWSIL™ 335 Butyl Sealant Black is supplied in 7.4 kg slugs (cylinders) and can be made available in other container sizes on request.

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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