



Technical Data Sheet

DOWSIL™ Crystal Clear Spacer

Transparent spacer for “full vision” insulating glass

Features & Benefits

- Warm edge spacer with very low thermal conductivity
- High clarity and transparency
- Crystal clear glass edge
- Good adhesion to glass
- Good adhesion durability when used with primer
- High flexibility – lower risk of glass breakage
- Easy to apply -and- bendable
- Excellent resistance to UV, temperature variation and ozone

Composition

- Silicone based cured elastomer

Applications

- Crystal clear spacer for insulating glass designs

Typical Properties

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

Test ¹	Property	Unit	Result
	Color		Crystal clear
	Consistency		Solid elastomer
	Specific gravity	g/ml	0.97
	Corrosiveness		None
ISO 8339	Tensile strength at break	N/mm ²	0.05
ISO 8339	Elongation at break	%	80
ISO 8339	Modulus at 12.5% elongation	N/mm ²	0.013
ASTM D-2240	Durometer hardness, Shore 00		40
EN 12667	Thermal conductivity (λ)	W/mK	0.16
ASTM D1003	Light transmission between 450 and 700 nm	%	89

1. ISO: International Standardization Organization
ASTM: American Society for Testing and Materials
EN: European Norm

Description

DOWSIL™ Crystal Clear Spacer is a ready to apply, preformed silicone spacer that can be used in the assembly of insulating glass, glass doors or other glass panels, where a full vision required. When used in combination with glass or other transparent substrates, it enables excellent full vision panel aesthetics.

DOWSIL™ Crystal Clear Spacer develops chemical adhesion within 5 minutes of application to many substrates when used in combination with DOWSIL™ 1200 OS Primer. It is important to carefully follow the application instructions in the spacer application section of this technical datasheet. Once applied and adhesion to the substrate is fully developed, DOWSIL™ Crystal Clear Spacer is resistant to liquid ingress.

DOWSIL™ Crystal Clear Spacer is suitable for use as spacer and can also act as secondary sealant but will not provide a barrier to gas or moisture.

DOWSIL™ Crystal Clear Spacer is compatible with all DOWSIL™ Insulating Glass Secondary Silicones and will develop adhesion to these silicones upon contact.

DOWSIL™ Crystal Clear Spacer has a slight natural tackiness. If it is intended to function both as a spacer and as a secondary seal, edge protection is recommended to avoid physical damage or abrasion.

Spacer Application

Prior to application of DOWSIL™ Crystal Clear Spacer to a substrate, it is important to ensure that the substrate surface is clean and free from grease, oil, dust or particles. The use of a cleaner such as DOWSIL™ R-40 Universal Cleaner, is highly recommended for removal of greasy contamination from the substrate to be bonded.

DOWSIL™ Crystal Clear Spacer has a low natural surface tackiness. It is recommended that nitrile gloves are worn during application of DOWSIL™ Crystal Clear Spacer to avoid the appearance of finger prints on the material. This also ensures that no grease or dirt is transferred from hands to the surface of the spacer. DOWSIL™ Crystal Clear Spacer is supplied ready for use.

The use of DOWSIL™ 1200 OS Primer is required to develop good adhesion between the spacer and the substrates, such as glass, metal and plastics. NB: polyolefin and fluoropolymer-based substrates typically show poor adhesion to DOWSIL™ Crystal Clear Spacer, even with a primer. Cleaner and/or primer must NOT be applied to the spacer as this can impact the crystal clear appearance and affect the quality of adhesion build up. Once the glass surface has been properly cleaned, DOWSIL™ 1200 OS Primer should be applied to the substrate as per the instructions on the container label. Should gloves become contaminated with primer, they should be changed prior to handling the DOWSIL™ Crystal Clear Spacer.

**Spacer
Application
(Cont.)**

DOWSIL™ 1200 OS Primer should be allowed to air-dry for a minimum of 5 minutes and a maximum of 30 minutes prior to the application of DOWSIL™ Crystal Clear Spacer. Drying time is dependent on temperature and humidity. Optimum adhesion can be obtained when the primer is allowed to dry for 5 minutes following application, to react with the substrate. DOWSIL™ Crystal Clear Spacer should then be applied immediately (+23°C, 50% relative humidity). As the spacer is flexible, ensure that it is correctly positioned. Once applied, DOWSIL™ Crystal Clear Spacer cannot be removed from the primed surface without causing damage to the spacer.

The speed of adhesion buildup of DOWSIL™ Crystal Clear Spacer to the primed substrate depends on temperature, humidity and the nature of the substrate. Typically, after 5 minutes DOWSIL™ Crystal Clear Spacer will bond to the primed surface (+23°C, 50% rel. humidity). Please contact your Dow technical representative for detailed guidance.

**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**

12 months. Storage temperatures between +5°C and +25°C.

**Packaging
Information**

The spacer is packaged in a polyethylene film to protect it from dust and contaminants. Remove this packaging just prior to the use of the spacer to prevent any contamination of the spacer surface.

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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