



DOWSIL™ 690 Neutral Silicone

One-component, neutral-cure silicone sealant

Features & Benefits

- Good unprimed adhesion to a wide range of substrates
- Neutral cure; will not corrode galvanized/zinc-coated steel or attack concrete
- Excellent resistance to weathering, ultra-violet radiation, moisture, and temperature extremes
- Meets the requirements of ISO11600 - 20LM
- Movement capability $\pm 50\%$
- Non-sag sealant
- Ease of application – ready to use as supplied

Applications

- DOWSIL™ 690 Neutral Silicone is a one-part neutral cure silicone sealant suitable for perimeter sealing applications of windows and doors and multi-purpose applications in and around the house.

Typical Properties

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

Test ¹	Property	Unit	Result
	Cure system		Neutral
	Application temperature	°C °F	+5 to +50 +41 to +122
CTM 97B	Specific gravity Clear Colored		1.03 1.4
	Tack Free Time	min	30
As Supplied – Tested at 25°C, 50% Relative Humidity			
	Flow, Sag or Slump		Nil
As Cured – After 7 days at 25°C, 50% relative humidity			
ASTM D412	Ultimate Tensile Strength	MPa	1.00
ASTM D412	Ultimate Elongation at Break	%	300
CTM 99E	Hardness (Shore A) Clear Colored		25 31
	Movement Capability	%	± 50
	Service Temperature	°C	-20 to 120

1. CTM: Corporate Test Method, copies of CTMs are available on request.
2. ASTM: American Society for Testing and Materials

How to Use

Surface Preparation

Ensure that surfaces to be sealed are clean, dry, sound and grease-free. Primer is generally not required on non-porous surfaces. It is recommended that a field test be carried out prior to application. To confirm optimum adhesion on either a porous or non-porous surface, adhesion testing should always be carried out prior to the commencement of any project.

Masking

Areas adjacent to the joints should be masked with tape to prevent contamination of the substrates and to ensure a neat sealant line. Masking tape should be removed immediately after tooling.

Application Method

When back-up material is required, a closed cell polyethylene backer rod is recommended. Low tack polyethylene tape should be used in joints too shallow to allow the use of a backer rod. Back-up materials provide back pressure and prevent three sided adhesion that limits sealant movement capability. Tool the sealant with light pressure to spread the sealant against the backing material and joint surfaces before a skin forms. The applied sealant should be tooled, and masking tape removed before the sealant has formed a cured skin.

Clean-up

Excess sealant may be cleaned off tools and non-porous surfaces whilst in an uncured state using with DOWSIL™ R-40 Universal Cleaner. If sealant is misapplied to porous substrates, it should be left until it is just cured and then removed by peeling, cutting or other mechanical means. Care should be taken not to damage plastic or coated surfaces.

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 in cool, dry conditions below 30°C (86°F) in the original unopened containers, DOWSIL™ 690 Neutral Silicone has a usable life of 12 months from the date of production.

Packaging Information

DOWSIL™ 690 Neutral Silicone is supplied in 280 ml cartridges packed in boxes of 24 or 600 ml sausages packed in boxes of 20.

DOWSIL™ 690 Neutral Silicone is available in clear, white, bronze, grey and black.

Limitations

- Should not be applied to materials that bleed plasticizers or solvents or release by-products that may inhibit cure, affect adhesion or discolor the sealant (e.g., bituminous-based adhesives and coatings).
- Do not use in totally confined spaces because the sealant requires atmospheric moisture to cure.
- Do not use on uncured sealant other than DOWSIL™ 690 Neutral Silicone.
- Not recommended for use on submerged joints or in joints where physical abuse or abrasion are likely to be encountered.
- Not suitable for aquariums and submerged applications.

Limitations (Cont.)

- Not suitable for food contact applications.
- Do not use in structural glazing or insulated glazing applications.
- Do not expose the joint to environmental conditions before the full cure of the sealant.
- Not suitable for sanitary applications.
- Not recommended to be applied on copper or copper containing building materials.

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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