

Technical Data Sheet

DOWSIL™ 793T Silicone Glazing Sealant

One-part translucent, silicone rubber

Features & Benefits	 Ease of application- ready to use as supplied; no catalyzing or mixing required. Can be extruded in place from cartridges using ordinary caulking guns. All-temperature gunability consistency is virtually unchanged from -37°C to 71°C permitting the sealant to be applied in any season to dry, frost-free surfaces. Good weatherability like other Dow silicone building sealants, it is virtually unaffected by sunlight, rain, snow, ozone or temperature extremes. Long life reliability- cured sealant stays elastomeric from -54°C to 149°C without hardening, cracking or becoming brittle under normal weather conditions. Extended working time allows the applicator more working and tooling time after application of sealant resulting in neater appearance and greater efficiency. Easy to use; excellent recovery from extension and compression.
Composition	Non-structural glazing
Applications	 DOWSIL[™] 793T Silicone Glazing Sealant meets or exceeds the test requirements of: ASTM Specification C-920 Type S, Grade NS, Class 25, Use NT, G, A

Typical Properties

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

Test	Property	Unit	Result
As Supplied			
	Color		Translucent
MIL1-S-8802D	Tack-Free Time	min	Less than 90
MIL-S-8802	Curing Time	days at 25°C	3
	Full Adhesion	days	7–14
MIL-S-8802D	Flow, Sag or Slump	mm	Non-sag
	Working Time	min	15–30

1. MIL: Military Specification and Standards

Typical Properties (Cont.)

Test	Property	Unit	Result
As Cured – After 7 Days at 25°C and 50% RH			
ASTMD2240	Durometer Hardness, Shore A	points	26
ASTMD412	Ultimate Tensile Strength, Maximum Elongation	MPa	1.4
TT-S-01543A	Staining		None
TT-S00230C	Joint Movement Capability After 14 Days Cure	percent	+(-)25
ASTM D624	Tear Strength, Die B	N/m	3851

Description

DOWSIL[™] 793T Silicone Glazing Sealant is one-part neutral cure, construction grade sealant that easily extrudes in any weather. It quickly cures at room temperature by reaction with moisture in the air to produce a durable, flexible silicone rubber seal.

How to Use

Cleaning the Surface

Clean all joints and glazing pockets, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.

All substrates should be cleaned with a degreasing solvent such as xylene, toluene or MEK.

Note: When using any volatile solvent, always provide adequate ventilation. Avoid heat, sparks and open flame. Observe and follow all precautions listed on solvent container label.

Priming

Certain substrates may require the use of primer with this product. For further information please consult Dow or your local distributor.

Masking

Areas adjacent to joints may be masked to assure neat sealant lines. Do not allow masking tape to touch clean surfaces to which the silicone sealant is to adhere. Tooling should be completed in one continuous stroke immediately after sealant application and before a skin forms. Masking should be removed immediately after tooling.

Backing Materials

Open cell polyurethane foam rod is the recommended back-up material. Polyethylene tape is recommended for joints too shallow to allow foam rod.

Note: Prior to applying DOWSIL[™] 793T Silicone Glazing Sealant it is necessary to ensure the prevention of independent movement of glass panels. This can be achieved by using mechanical fasteners at the one-third and two-third points of the joint. The sealant may now be applied to the fastened joint. The fasteners are removed once the sealant has cured and the remaining gaps are filled with sealant.

How to Use (Cont.)	Method of Application Install back-up material or joint filler, apply DOWSIL [™] 793T Silicone Glazing Sealant in a continuous operation. A positive pressure through adequate nozzle size to fill the joint in a single pass should be employed. A thin bead of silicone sealant will accommodate more movement than a thick bead. For large joints or where feasible DOWSIL [™] 793T Silicone Glazing Sealant should be no thicker than 12 mm and no thinner than 6 mm with width to depth ratio 2:1.
	Tool or strike sealant with light pressure to spread the sealant against the back-up material and the joint surfaces. Tool immediately after sealant application and before a skin forms.
	A tool with a concave profile is recommended to keep the DOWSIL™ 793T Silicone Glazing Sealant within the joint. The sealant can be applied at outdoor temperatures as low as - 37°C provided that surfaces are clean, dry and frost free.
	Do not use soap or oil as a tooling aid. Remove masking as soon as each bead is tooled.
	Uncured sealant may be cleaned from tools and non-porous surfaces using commercial solvents such as xylol. On porous surfaces allow excess sealant to cure and then remove it by abrasion or other mechanical means.
Uses	DOWSIL [™] 793T Silicone Glazing Sealant is designed primarily for use in glass to glass applications. It is particularly effective for glazing butt, butt fin and lap shear joints and it can

be used for sealing curtain wall projections and other glass (see Figure 1).

Butt Joint Glazing 10mm → | ← Typical DOWSIL[™] 793T Silcone Glazing Sealant







Figure 1: Sealing Glass with DOWSIL™ 793T Silicone Glazing Sealant

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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 at or below 27°C DOWSIL [™] 793T Silicone Glazing Sealant has a shelf life of 540 days or 18 months from date of shipment. Keep containers tightly closed to avoid contact with moisture. Previously opened cartridges may be used by simply removing the cured plug of sealant from the nozzle.
Packaging Information	DOWSIL™ 793T Silicone Glazing Sealant is supplied in 310 g (300 ml) disposable plastic cartridges.
Shipping Limitations	None.
Limitations	 DOWSIL[™] 793T SILICONE GLAZING SEALANT IS NOT RECOMMENDED FOR USE IN STRUCTURAL GLAZING. DOWSIL[™] 793T Silicone Glazing Sealant is not recommended for use in continuous water immersion, nor for below ground or other joints where excessive abrasion and physical abuse are encountered. It should not be applied. To building materials that bleed oils, plasticizers, or solvents-materials such as impregnated wood, oil-based caulks, and certain green or partially vulcanized rubber gaskets and tapes. In totally confined spaces where sealant is not exposed to atmospheric moisture. To surfaces in direct contact with food. This sealant has not been tested to determine status under Federal Food and Drug Administration regulations. To any uncured sealant apart from DOWSIL[™] 793T Silicone Glazing Sealant.
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.

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