

DOW CORNING® 794S Plastics & Glass Silicone Sealant

FEATURES

- Primerless adhesion on a large variety of substrates
- Neutral alkoxy technology also available in clear
- 100% silicone polymer
- Neutral cure
- Low odor
- Conforms to ISO 11600-F&G-25LM
- Resistant to ozone, ultra-violet radiation and temperature extremes

Neutral silicone sealant

APPLICATIONS

- DOW CORNING 794S Plastics & Glass Silicone Sealant is a one-part, low modulus, neutral curing silicone sealant specifically developed for use in glazing and cladding applications. It has excellent adhesion to both porous and non-porous substrates including plastics and polycarbonate sheeting. DOW CORNING 794S Silicone Sealant is mold and mildew resistant.

TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

Test method*	Property	Unit	Value
	Cure system		Alkoxy
	Application temperature	°C	+5 to +40
		°F	+41 to +104
CTM97B	Specific gravity		1.02
CTM364C	Extrusion rate	g/minute	170
CTM98B	Skin-over time (23°C or 73°F, 50% R.H.)	minutes	5-10
CTM95A	Tack-free time (23°C or 73°F, 50% R.H.)	minutes	35
CTM663A	Cure in depth		
	1 day	mm	2
	3 days	mm	3
	2mm thickness S2 dumb-bells (ISO 37/DIN 53 504)		
CTM137A	Tensile break	MPa	1.6
CTM137A	Mod100%	MPa	0.35
CTM137A	Elongation at break	%	500
CTM99	Hardness (Shore A)		20
	12x12x50mm size technically approved joint (ISO8339/DIN2-8339)		
NF P85507	Tensile break	MPa	0.55
NF P85507	Mod100%	MPa	0.38
NF P85507	Elongation at break	%	300
NF P85507	Failure mode	% Cohesive failure	100
ISO7389	Elastic recovery	%	>90
ISO11600	Joint movement capability	%	±25

* ASTM: American Society for Testing and Materials.

ISO: International Standardisation Organisation.

DIN: Deutsche Industrie Norm.

NF: Norme Française, issued by AFNOR, Association Française de NORmalisation.

TECHNICAL SPECIFICATIONS AND STANDARDS

Conforms to SNJF Vitrage et Façade Category 1, DIN 18545 Gr.E, ISO 11600-F&G-25LM.

HOW TO USE

Surface preparation

Ensure that all surfaces are clean, dry, sound and free from frost. Clean all joints of release agents, water repellents, laitance, dust, dirt, old sealants and other contaminants which could impair adhesion. Surfaces should be cleaned and degreased by wiping with a suitable solvent, such as DOW CORNING® R40 Universal Cleaner on an oil and lint-free cloth before application of sealant.

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

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.

Priming

A primer is not required when used in conjunction with most common construction substrates. For specific advice, please refer to the Dow Corning Primers' Guide or contact one of Dow Corning's Regional Service Centers for technical assistance.

Back-up materials

Closed cell polyethylene backer rod is recommended as a back-up material to provide back pressure and avoid three-sided adhesion that limits sealant movement capability. Low tack polyethylene tape should be used in joints too shallow to allow the use of backer rod.

Finishing

The joint should be tooled within 5 minutes of application to ensure good contact between the sealant and the substrate. Tooling of the sealant also gives a smooth, professional finish.

Clean-up

Excess sealant may be cleaned off tools and non-porous surfaces whilst in an uncured state using DOW CORNING R40 Universal Cleaner. If sealant is misapplied to porous substrates, it should be left until just cured, and then removed by peeling, cutting or other mechanical means. Care should be taken not to damage plastic or coated surfaces.

Joint design

The sealant joint width should be designed to accommodate the movement capability of the sealant. When designing joints using DOW CORNING 794S Silicone Sealant, the minimum width should be 6mm. For joints between 6-12mm wide, a seal depth of 6mm is required. For joints above 12mm wide, a width to depth ratio of 2:1 should be used. For joint dimensions greater than 25mm, please contact one of Dow Corning's Regional Service Centers for technical assistance. In situations where fillet joints are needed, a minimum of 6mm sealant bite to each substrate is recommended.

Figure 1: Deep joint.

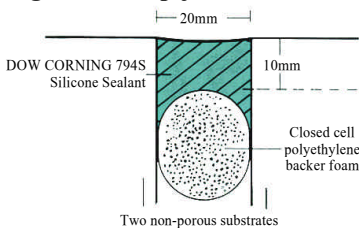


Figure 2: Shallow joint.

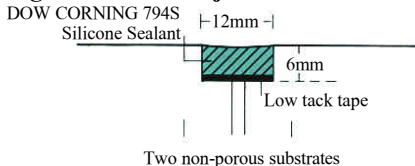
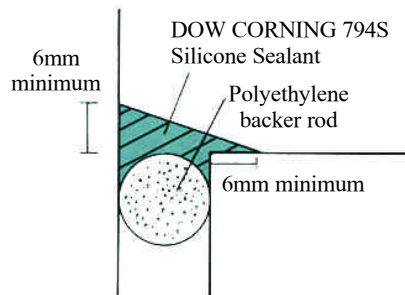


Figure 3: Fillet joint.



HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. 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 FROM YOUR LOCAL DOW CORNING SALES REPRESENTATIVE.

USABLE LIFE AND STORAGE

DOW CORNING 794S Silicone Sealant should be stored in cool and dry conditions.

When stored at or below 30°C (86°F) in the original unopened containers, DOW CORNING 794S Silicone Sealant has a usable life of 18 months from the date of production.

PACKAGING

DOW CORNING 794S Silicone Sealant is supplied in 300ml sausages for use with the Dow Corning ECO master system packed in boxes of 12, 310ml cartridges packed in boxes of 12, 400ml sausages packed in boxes of 15 and 600ml cartridges packed in boxes of 20. Please contact your local Dow Corning sales office for the color availability in each pack size.

LIMITATIONS

Do not use DOW CORNING 794S Silicone Sealant on bituminous substrates, substrates based on natural rubber, chloroprene or EPDM or on building materials which might bleed oils, plasticizers or solvents.

It is not recommended for use with

certain plastics, generally the flexible plasticized type.

DOW CORNING 794S Silicone Sealant is not suitable for food contact applications.

It is recommended that painted surfaces are allowed to dry for 24 hours before applying

DOW CORNING 794S Silicone Sealant, to ensure the integrity of the substrates.

DOW CORNING 794S Silicone Sealant is not recommended for structural glazing or insulated glazing applications.

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 Corning has an extensive Product Stewardship organization and a team of Health, Environment and Regulatory Affairs specialists available in each area.

For further information, please consult your local Dow Corning representative.

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 Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Dow Corning's sole warranty is that the product will meet the Dow Corning sales specifications in effect at the time of shipment. 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. Dow Corning specifically

disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Unless Dow Corning provides you with a specific, duly signed endorsement of fitness for use, Dow Corning disclaims liability for any incidental or consequential damages.

Suggestions of use shall not be taken as inducements to infringe any patent.

