

**Technical Data Sheet** 

# DOWSIL<sup>™</sup> 995 Silicone Structural Sealant

High ultimate tensile strength sealant ideally suited for structural bonding and protective glazing applications

Features & Benefits	<ul> <li>Odorless, non-corrosive cure system</li> <li>Cures to form an extremely tough elastomeric rubber ensuring a durable, flexible, watertight bond</li> <li>Excellent weatherability and high resistance to ultraviolet radiation, heat and humidity, ozone and temperature extremes</li> <li>Excellent mechanical properties</li> <li>Successfully tested for use in protective glazing applications</li> <li>Excellent unprimed adhesion to wide range of substrates including coated, enameled, and reflective glasses; anodized and polyester coated or painted aluminum profiles including most fluoropolymer-based paints such as Kynar</li> <li>Meets global standards for structural glazing (American, Chinese, European)</li> </ul>
Composition	One-part, neutral-cure elastomeric sealant
Applications	Silicone structural glazing and protective glazing applications

## **Typical Properties**

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

Test <sup>1</sup>	Property	Unit	Result
	As Supplied		
	Color		Black, Gray, White
ASTM C679	Tack-Free Time, 50% RH	Minutes	65
	Curing Time 25°C (77°F) at 50% RH	Days	7–14
	Full Adhesion	Days	14–21
ASTM C639	Flow, Sag, or Slump	Inches	0.1
	Working Time	Minutes	10–20
	Specific Gravity		1.339
	Volatile Organic Content <sup>2</sup> (VOC)	g/L	30

 ASTM: American Society for Testing and Materials.
 Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds.

## **Typical Properties (Cont.)**

Test	Property	Unit	Result
	As Cured – After 7 Days at 25°C (77°F), 50% RH		
ASTM 2240	Durometer Hardness, Shore A	Points	40
ASTM D412	Ultimate Tensile Strength	Psi (MPa)	350 (2.41)
	Ultimate Elongation	%	525
ASTM D624	Tear Strength, Die B	ррі	49
ASTM C794	Peel Strength	ррі	40
	As Cured – After 21 Days at 25°C (77°F), 50% RH		
ASTM C1135	Tensile at 25% Elongation	psi (MPa)	43 (0.30)
ASTM C1135	Tensile at 50% Elongation	psi (MPa)	65 (0.43)
	Ultimate Tensile Strength	psi (MPa)	170 (1.17)
ASTM C719	Joint Movement Capability	%	± 50

## Description

DOWSIL<sup>™</sup> 995 Silicone Structural Sealant is a one-component neutral-curing silicone sealant designed specifically for structural bonding applications of glass and metal in factory or field situations.

The rate of surface cure and cure-in- depth of most one-component RTV silicone sealants is affected by the temperature and humidity of the environment. However, an environment of high temperatures in combination with high humidity may slow the surface cure rate of DOWSIL 995 Silicone Structural Sealant.

## Colors

This product is available in black, gray, and white.



## Approvals/ Specifications

DOWSIL 995 Silicone Structural Sealant has been internally tested and is designed to meet or exceed the test requirements of:

- Federal Specification TT-S- 001543A (COM-NBS) Class A for silicone building sealant
- Federal Specification TT-S-00230C (COM-NBS) Class A for one-component building sealant
- ASTM Specification C-920 Type S, Grade NS, Class50, Use NT, G and A
- ASTM C1184 Standard Specification for Structural Silicone Sealant
- Chinese specification GB 16776 for structural glazing
- SNJF VEC



DOWSIL 995 Silicone Structural Sealant exhibits a high level of physical properties and adhesive performance, which are retained even after aging as detailed by EOTA ETAG 002 and prEN 13022 European Standards.

**How To Use** Complete design and installation guidelines are contained in the Dow Americas Technical Manual, Form No.62-1112. Specific advice is available from your local Dow Sales Application Engineer.

### Preparation

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.

### **Application Method**

Install back-up material or joint filler, setting blocks, spacer shims, and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but may be necessary for optimal sealing of certain porous surfaces. A test placement is always recommended.

Apply DOWSIL 995 Silicone Structural Sealant in a continuous operation using a positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment.) Before a skin forms (typically within 10 minutes), tool the sealant with light pressure to spread the sealant against the backing material and joint surfaces. Remove masking tape as soon as the bead is tooled.

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 CONSUMER.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 30°C (86°F) in the original unopened containers, this product has a usable life of 18 months from the date of manufacture.
Packaging Information	This product is available in 10.3 ounce cartridge, a 20 ounce sausage pack, 2 gallon pail, 4.5 gallon pail, and a 228.1 kg drum, depending on location of purchase.
Limitations	DOWSIL 995 Silicone Structural Sealant should not be applied:
	<ul> <li>To building materials that bleed oils, plasticizers, or solvents- materials such as impregnated wood, oil-based caulks, green or partially vulcanized rubber gaskets or tapes</li> <li>In totally confined spaces as the sealant requires atmospheric moisture for cure</li> <li>When surface temperatures exceed 60°C (140°F)</li> <li>Where painting of the sealant is required, as the paint film may crack and peel</li> <li>To surfaces in contact with food- this sealant does not comply with Federal Food and Drug Administration food-additive regulations</li> <li>In below-grade applications</li> <li>For use as an interior penetration fire stop sealing system</li> <li>In horizontal floor joints where abrasion and physical abuse are likely to be encountered</li> <li>To frost-laden or damp surfaces</li> <li>For continuous immersion in water</li> </ul>
	This product is neither tested nor represented as suitable for medical or pharmaceutical uses.
	Dow shall not be held liable for any possible claims arising from structural glazing use of this product for projects that have not been specifically approved by Dow.
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, consumer.dow.com or consult your local Dow representative.

#### consumer.dow.com

#### LIMITED 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 our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow's sole warranty is that our products will meet the 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.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

