

**Technical Data Sheet** 

# DOWSIL<sup>™</sup> 799 EU Glaze and Go Sealant

# Features & Benefits

- Neutral cure
- Low modulus, high elasticity
  - Good unprimed adhesion to a variety of substrates
  - Non-corrosive to metals
  - Easy to apply and tool
  - Low odor
  - Confirms to ISO11600-F&G-25LM
- Resistant to ultra-violet radiation
- Contains fungicide

# Applications • DOWSIL<sup>™</sup> 799 EU

- DOWSIL<sup>™</sup> 799 EU Glaze and Go Sealant is a one-part neutral curing, low modulus silicone sealant specially formulated for glazing and weathersealing of windows.
- DOWSIL<sup>™</sup> 799 EU Glaze and Go Sealant offers durable adhesion to most porous and non-porous substrates including masonry, brick, aluminium, PVC, glass and glazed surfaces.
- DOWSIL™ 799 EU Glaze and Go Sealant is mold and mildew resistant.

### **Typical Properties**

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

CTM <sup>1</sup>	Property	Unit	Result
	Cure system		Neutral
	Application temperature	°C	+5 to +40
		°F	+41 to +104
097B	Specific gravity	g/ml	1.03
364C	Extrusion	g/min	90
155A	Penetration	1/10 mm	110
098	Skin-over time (23°C or 73.4°F, 50% R.H.)	minutes	12
095A	Tack-free time (23°C or 73.4°F, 50% R.H.)	minutes	18
663A	Cure rate (23°C or 73.4°F, 50% R.H.)		
	1 day	mm	2.8
	3 days	mm	4.3

1. CTM: Corporate Test Method, copies of CTM's are available on request.

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

Test	Property	Unit	Result
	2 mm thickness S2 dumb-bells (ASTM <sup>2</sup> D 412)		
137A	E-modulus 100%	MPa	0.31
137A	Tensile strength	MPa	1.3
137A	Elongation at break	%	600
	12x12x50 mm size T.A. joint (ISO <sup>3</sup> 8339/DIN <sup>4</sup> 52455-2)		
677	E-modulus 100%	MPa	0.3
677	Tensile strength	MPa	0.55
677	Elongation at break	%	340
677	Failure mode, cohesive failure	%	100
99E	Hardness (Shore A)		16

- 2. ASTM: American Society for Testing and Materials.
- 3. ISO: International Standardization Organization.
- 4. DIN: Deutsche Industrie Norm.

## Technical Specifications and Standards

- Conforms to SNJF (F&G 25E)
- DIN 18545 E
- ISO 11600 F 25LM mortar (primed)
- ISO 11600 G 25LM (Façades & Vitrages)
- EN 15651 CE MARK



Regulation or protocol	Conclusion	Version of regulation or protocol
French VOC régulations	A+	Regulation of March and May 2011 (DEVL1101903D and DEVL1104875A)
French CMR components	Pass	Regulation of April and May 2009 (DEVP0908633A and DEVP0910046A)
AgBB/ABG	Pass	Anforderungen an bauliche Anlagen bezOglich des Gesundheitsschutzes (ABG), Entwurf 31.08.2017/August 2018 (AgBB)
Belgian Regulation	Pass	Royal decree of May 2014 (C-2014/24239)
EMICODE	EC 1	April 2019
Indoor Air Comfort	Pass	Indoor Air Comfort 6.0 of February 2017
BREEAM International	Compliant	BREEAM International New Construction v2.0 (2016)
BREEAM Norway	Pass	BREEAM-NOR New Construction v1.2 (2019)
CDPH	Pass	
M1	Pass	

#### How to Use Surface Preparation

Surfaces must be cleaned, dry and free from grease and dust. Non-porous surfaces, such as aluminum, glass etc., should be cleaned with a suitable solvent for the substrate.

Porous substrates such as concrete, brickwork, mortar, etc. must be mechanically cleaned from loose particles using a steel brush, sanding disc, or any similar means. The use of a primer is recommended to obtain durable adhesion performance on such porous substrates, or if water immersion is expected to occur during the service life of the assembly. Otherwise, primers are not usually required but might be needed for some specific substrates to achieve optimum adhesion.

#### Priming

This product adheres to a variety of porous and non-porous substrates.

Users must carry out their own tests due to the great variety of substances. In many cases, adhesion can be improved by pretreatment of the substrates with a primer:

- DOWSIL<sup>™</sup> 1200 OS Primer for metals
- DOWSIL<sup>™</sup> Primer P for concrete and brick

#### How to Apply

DOWSIL<sup>™</sup> 799 EU Glaze and Go Sealant is ready to use. After suitable joint preparation and masking, the sealant is gunned into place and tooled within 5 to 10 minutes using a spatula or tooling instrument.

After tooling, tooling aids and masking tape should be immediately removed.

DOWSIL<sup>™</sup> 799 EU Glaze and Go Sealant cures reacting with atmospheric moisture. Typical properties are given for testing conditions of 23°C (73.4°F) and 50% R.H.

Uncured material can be removed by using a solvent. Cured material may be removed by abrasion or other mechanical means.

#### **Joint Design**

The sealant joint width should be designed to accommodate the movement capability of the sealant. In general, the minimum joint width should be 6 mm. For joints between 6-12 mm wide, a seal depth of 6 mm is recommended.

For joints above 12 mm wide, a width to depth ratio of 2:1 should be used, up to a maximum depth of 12 mm. For joint dimensions greater than 25 mm, please contact your local technical service department.

In situations where fillet joints are needed, a minimum of 6 mm sealant bite to each substrate is recommended. Bond beaker tape or a backer rod should be used as back-up material to provide backpressure and avoid three-sided adhesion that limits sealant movement capability.

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 30°C (86°F) in the original unopened containers, this product has a usable life of 12 months from the date of production.
Packaging Information	This product is available in 205 kg drums, 310 ml cartridges, 400 and 600 ml sausages.
Limitations	Do not use DOWSIL <sup>™</sup> 799 EU Glaze and Go Sealant in totally confined space because the sealant requires atmospheric moisture to cure. Bleeding can occur on porous substrates such as concrete, marble, granites and other natural stones. On these sensitive substrates, specific testing should be carried out.
	DOWSIL™ 799 EU Glaze and Go Sealant must be properly stored prior to use.
	DOWSIL <sup>™</sup> 799 EU Glaze and Go 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 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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