

# **DOW CORNING® 791 Silicone Weatherproofing Sealant**

# Neutral one-part silicone sealant

# **APPLICATIONS**

 DOW CORNING 791 Silicone Weatherproofing Sealant is a specified, premium performance weathersealing product, specifically designed for general glazing and weathersealing in curtain wall and building facades.

#### 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
	Uncured - As tested at 50% RH and	d 23°C (73°F)	
ASTM D 2202	Flow (sag or slump)	mm or inches	0
ASTM C 603	Extrusion rate	g/minute	210
CTM 98B	Working time	minutes	15
ASTM C 679	Tack-free time	minutes	35
	Curing time	days	7-14
CTM 97B	Specific gravity		1.52
	Application temperature range	°C	-25 to 50
		°F	-13 to 122
	As cured – after 7 days at 50% RH	and 23°C (73°F)	)
ASTM D 2240	Durometer hardness	Shore A	30
ISO 7389	Elastic recovery	%	91
ISO 9047	Movement capability	%	±50
ISO 11600	Sealant Class		Low Modulus 25LM F and G
	Cured – after 28 days at 50% RH and 23°C (73°F)		
	12*12*50mm size T.A. joint (ISO 8339)		
	0.5*0.5*2 inches size T.A. joint (ASTM C 1135)		
	Tensile/modulus at 25% elongation	MPa	0.3
		psi	40
	Tensile at 50% elongation	MPa	0.35
		psi	60
	Modulus at 100% elongation	MPa	0.4
		psi	70
	Ultimate tensile strength	MPa	0.75
		psi	120
	Ultimate elongation at break	%	460
ASTM C 711	Service temperature range	°C	-50 to 150
		°F	-58 to 302

- \* CTM: Corporate Test Method, copies of CTMs are available on request.
- ASTM: American Society for Testing and Materials. ISO: International Standardisation Organisation

# **FEATURES**

- Ideal for expansion, connection, perimeter and other movement joints
- Neutral cure suitable for use on coated glass, galvanized steel, copper, masonry and other porous and non-porous substrates
- Low modulus sealant according to ISO Standards, medium modulus according to ASTM standards
- Extension/compression movement capability of up to ±50% of the original joint width

#### **BENEFITS**

- Excellent weatherability, virtually unaffected by sunlight, rain, snow, ozone or temperature extremes
- Excellent unprimed adhesion to a wide variety of construction materials and building components, including Kynar<sup>®</sup> and anodized coated aluminium. For further clarification, refer to the application method in this data sheet
- Ease of application ready to use as supplied
- Excellent rheology, low string upon gunning
- Meets Global standards. (America, Asia and Europe)
- Compatible with all Dow Corning structural sealants

#### DESCRIPTION

DOW CORNING 791 Silicone Weatherproofing Sealant is a one-part, neutral cure, architectural grade sealant. It easily extrudes in any weather and quickly cures at room temperature by reaction with moisture in the air to form a durable, flexible silicone rubber seal.

#### **SPECIFICATIONS**

Meets the requirements of: **ASTM C- 920** Type S, Grade NS, Class 25, Use NT, M, G, A **ISO 11600** F&G-25LM **GB/T 14683b** G and F (China)

BS 5889,

DIN 18540 Class NF

SNJF Vitrage et Façade Category 1

#### **HOW TO USE**

Please consult the Dow Corning Application Manual for detailed information on state-of-the art application methods and joint design. (See contact list.) Please contact your local Dow Corning sales office for specific advice.

#### **Preparation**

Clean all joints 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 backing material or joint filler, setting blocks, spacer shims and tapes. Areas adjacent to joints may be masked to ensure neat sealant lines. Primer is generally not required on non-porous surfaces. On porous surfaces, Dow Corning recommend that a test sample 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. Please contact your local Dow Corning sales office for specific advice.

Apply DOW CORNING 791 Silicone Weatherproofing Sealant in a continuous operation using a positive pressure. Tool the sealant with light pressure to spread the sealant against backing material and the joint surfaces before a skin forms. The applied sealant should be tooled within 15 minutes or before a cured skin forms. Remove masking tape as soon as the bead is tooled.

#### 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 material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

# 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**

This product is available in 300 and 310ml disposable cartridges and in 500 and 600ml foil sausages depending on location of purchase. Please check with your local Dow Corning sales office for local packaging range availability.

# **COLORS**

This product is available in 6 colors: black, gray, bronze, limestone, precast white and white. Please contact your local Dow Corning sales office for additional local color availability. Custom colors are also available upon request.

#### **LIMITATIONS**

This product is not approved for use as a structural sealant.

This product should not be applied:

- To building materials that bleed oils, plasticizers or solvents, green or partially vulcanized rubber gaskets or tapes
- In totally confined spaces
- For continuous immersion in water or in below-grade applications
- When surface temperatures exceed 50°C (122°F)
- To frost-laden or wet surfaces

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 Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

# 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 Dow Corning's 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.

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