

# OLIVÉ C-27

## NEUTRAL ELASTIC SILICONE SEALANT

Technical Data Sheet - Version 4.2 - July '17



### PRODUCT DESCRIPTION:

OLIVÉ C-27 is a one part, low modulus, neutral cure silicone sealant that reacts with the atmospheric moisture producing a flexible rubber extremely resistant. It does not contain corrosive or strong smell additives.

OLIVÉ C-27 preserves all properties of elasticity and adherence with no ageing problems, remaining stable in front of atmospheric agents.

### MAIN BENEFITS:

- Low modulus and high elasticity.
- High movement capability.
- Excellent adhesion to a wide range of substrates without priming.
- UV radiation, weather and ageing resistant.
- Extremely long service life.
- Very easy to apply and tool.
- Low odour.
- Non-corrosive to metals.

### PRODUCT CERTIFICATIONS:

Olivé C-27 meets the following specifications:

- CE marking: EN 15651-1 F-EXT-INT-CC  
EN 15651-2 G-CC

### ENVIRONMENTAL REGULATIONS:

- French VOC-emission class B.

### PACKAGING INFORMATION:

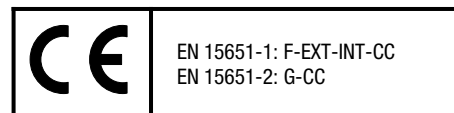
This product is available in 300ml cartridges. Other packaging is available under request.

### COLOURS INFORMATION:

Translucent and white. Other colours are available on special order.

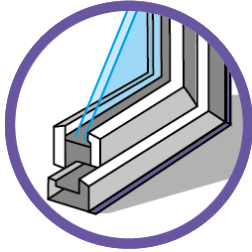
### STORAGE:

The shelf life is 12 months in its unopened original packaging, in dry conditions and protected from direct sunlight at temperatures between +5°C and +25°C.



\* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

## FIELDS OF APPLICATION:



Perimeter and connection joints for aluminium, wood and PVC carpentry  
 Sealing of joints between porous and non-porous substrates including concrete, masonry, brick, aluminium (lacquered, anodized, painted, . . .), PVC, glass, ceramics and most plastics.  
 Glazing weathersealing of windows.  
 Sealing of precast concrete wall units.

## TYPICAL TECHNICAL DATA:

Basis:		Neutral oxime silicone
Consistency:		Non-slump paste
Specific gravity:	(ISO 2811-1)	Approx. 0,97 g/ml
Tack free time:	(OQ.06-internal)	5 minutes (at 23°C; 50% R.H.)
Skin forming time:	(OQ.16-internal)	Approx. 5-15 minutes (at 23°C; 50% R.H.)
Curing rate:	(OQ.18-internal)	Approx. 3 mm/24 hr.
Resistance to flow:	(ISO 7390)	0 mm (at 5°C and 50°C)
Elastic recovery:	(ISO 7389)	> 80% (at 100% elongation)
Loss of volume:	(ISO 10563)	< 30%
Shore A hardness:	(ISO 868)	Approx. 20
Total VOC content:	(SCAQMD rule 1168)	Approx. 185 g/l
Application temperature:		Between +5°C to +40°C
Service temperature:		-40°C to +150°C

### Tensile properties:

#### ISO 37 (2mm thickness, S2 dumbbells, 7 days 23°C;50% R.H.)

E-Modulus 100%	0,28 MPa
Tensile strength	0,90 MPa
Elongation at break	450 %

#### ISO 8339 (12x12x50 mm joint, 28 days, 23°C;50% R.H.)

E-Modulus 100%	0,30 MPa
Tensile strength	0,45 MPa
Elongation at break	300 %

These values may vary depending on environmental factors such as temperature, moisture, and type of substrates. The time until complete curing may be extended at lower temperature, lower humidity or increasing film thickness.

## DIRECTIONS FOR USE:

### Surface preparation and sealant application:

#### A. Cleaning and joint preparation:

Substrates (joint flanks) must be clean, dry, and free of dust, grease and other contaminant which may affect the adhesion. Non-porous surfaces (such as aluminium, glass, etc.) should be cleaned with a suitable solvent and thoroughly dried with a clean cloth. Porous substrates (such as concrete, brickwork, etc.) must be mechanically cleaned from loose particles. Mask off the joint edges.

#### B. Primer:

OLIVÉ C-27 adheres to most common construction materials without primer. However, a preliminary adhesion test is recommended on every surface. Sometimes, it may be necessary to treat the joint surfaces with a primer to obtain better adhesion performances.

##### Olivé Primers:

Product:	Application
Olivé PRIMER 10:	Porous surfaces. (e.g. concrete, cement, marble, natural and artificial stone, etc.)
Olivé PRIMER 20:	Non-porous surfaces. (e.g. aluminium, iron, stainless steel, zinc, copper, brass, painted surfaces and most plastics)
Olivé PRIMER 80DS:	All surfaces. Substrates exceptionally difficult to adhere on.

#### C. Inserting backing material:

Use the closed cell polyethylene backer foam OLIVÉ CORDON CELULAR as a back-up material to limit the sealant joint depth and avoid the sealant to adhere to the joint base. Choose the right backing strip diameter (at least 25% wider than the joint width)

#### D. Silicone sealant application:

After substrate preparation, apply the sealant with a professional caulking gun, evenly and without bubbles. Observe the eventually used primer's open time before filling the joint.

#### E. Tooling and finishing:

The joint should be tooled and smoothed before skin formation. Press the sealant and smooth it ensuring good contact with the surfaces to seal. Use neutral soapy water as a tooling agent. Remove masking tape. Uncured product may be easily removed with solvents such isopropyl alcohol or "white spirit". Cured sealant must be removed mechanically.

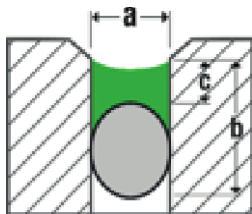
### Remarks:

Do not use OLIVÉ C-27 on bituminous substrates or on building materials which might bleed oils, plasticizers or solvents. (e.g. natural rubber, chloroprene, EPDM, ...).

There is no adhesion to PE, PP, PTFE (Teflon®). Due to the wide variety of possible substrates, we recommend a preliminary compatibility test.

OLIVÉ C-27 cannot be overpainted.

Not intended for structural glazing.



## Joint design:

Expansion joints should be correctly dimensioned taking account of dimensional changes in the substrates due to thermal fluctuations. Joint's dimensions should match with the sealant movement capability, with a maximum permitted value of 25%.

Use closed cell polyethylene backer foam (Olivé BACKER ROD) as a back-up material to limit the sealant joint depth and avoid three-sided adhesion.

## JOINT DIMENSIONING

- a** Joint width
- b** Joint depth
- c** Sealant depth
- Silicone sealant
- Backing material

### The following general rules/recommendations should be followed:

General statement:	The ideal joint has a 2:1 width: depth ratio
Minimum joint dimensions:	5-6mm width x 5-6 mm depth.
Up to 12 mm wide:	width = depth
From 12mm to 24mm wide:	depth = ½ width
Wider than 24mm:	depth = 12-15mm
Expansion joints should not be wider than 50mm.	

## Coverage:

Estimated consumption in linear meters per 300 ml. cartridge (approx.):

Joint width (a):	5 mm	6 mm	8 mm	10 mm	12 mm	15 mm	20 mm	25 mm	30 mm
<b>Joint depth (b):</b>									
<b>5 mm</b>	12	10	8	6	5	4	3	2,5	2
<b>8 mm</b>	8	6	5	4	3	2,5	1,8	1,5	1,2
<b>10 mm</b>	6	5	4	3	2,5	2	1,5	1,2	1
<b>12 mm</b>	5	4	3	2,5	2	1,6	1,2	1	0,8
<b>15 mm</b>	4	3,5	2,5	2	1,6	1,3	1	0,8	0,6

Green shades determine the width to depth recommended ratio.

## Safety:

Use in well ventilated areas and avoid skin and eye contact. Keep out of the reach of children.

The information regarding the safety of the product is available on safety data sheet (SDS). Before using the product, we recommend to read carefully the SDS and the safety labels.

## GUARANTEE INFORMATION:

Olivé Química warrants that its product complies, within its shelf life, to its specification.

If any responsibility were to be considered ours, this would be only for any damages and for the value of the merchandise supplied by us and used by the customer. It is over understood that we warranty the irreproachable quality of our products in accordance with our General Conditions of Sales and Supply.

### Liability

The information in this document, in particular recommendations regarding the application and final use of our products, are given in good faith based on our knowledge and is the result of tests and experience and are intended as guidelines. It is the responsibility of the user to determine whether the product is suitable for the application. Due to the great variety of materials and conditions, which are beyond our knowledge and control, we recommend carrying out sufficient previous trials.

The property rights of third parties must be respected.

**This TDS replaces and supersedes all previous data sheets on the same product.**

# Olivé

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