# **ALCOSIL**

#### PRODUCT DESCRIPTION

One part moisture curing silicone sealant, neutral reaction, fast cure.

#### **PRODUCT CHARACTERISTICS**

- Excellent elasticity, low modulus, capacity to absorb high deformation.
- Good adhesion to almost materials commonly used in building, i.e. cement, brick, natural stone (previous test is recommended), ceramics, porcelain, insulated panels, anodised aluminium, many plastics, vinyl, polycarbonate, painted materials (previous adhesion test is recommended).
- Resistance to weathering and light, with negligible change in elasticity in a wide range temperature range -50°C/+100°C.
- Product easy to extrude ina a wide range of temperatures (+5°/+40°C).
- Low slump, for application to horizontal and vertical surfaces. Wide open time, easy to tool.

## **USES** (professional)

- For sealing glazed surfaces and glass facades.
- · For perimeter sealing of frames made from metal, wood and uPVC.
- For sealing joints of curtainwalls and panels.
- For sealing skylights, glazed and plastic coverings.
- For applications in closed, non smelling spaces.
- For assembling mirrors.







#### **LIMITATIONS**

- ALCOSIL must not be used for insulating glass applications nor for structural glazing bonding.
- It is not recommended for the production of aquaria nor for longterm use under water.
- Not suitable for joints in swimming pools and adjacent areas that are in continuous contact with pool water.
- Non specific for sealing on to marble and natural stone, previous compatibility tests are always recommended.
  It should not be used in contact with materials blending oily matters or placticiars, nor on surfaces to be
- It should not be used in contact with materials bleeding oily matters or plasticizers, nor on surfaces to be overpainted. It is not suitable for use in food contact applications.
- The sealant is not recommended for use in totally confined joints not exposed to air moisture nor for use in joints submitted to abrasion.
- Do not use in extreme temperature conditions, or on damp, frozen, contaminated surfaces.
- Do not use on excessively acidic or basic substrates.
- For any application not listed in this document please contact our Technical Service.

## **TECHNICAL DATA**

Polymers and curing system:	100% silicone, alcoxy
Consistency:	tixotropic, non-slumping paste
Application temperature:	+5°C / +40°C
Tooling time:	10 minutes
Tack free time	20 minutes
Curing time:	1 - 5 days depending on temperature and humidity and on cross section of applied sealant cord
Shore A Hardness (ASTM D2240, ISO 868):	20
Tensile strength (ASTM D412, ISO 37, S2):	1,2 MPa
Elongation at break (ASTM D412, ISO 37, S2):	550%
100% Modulus (ASTM D412, ISO 37, S2):	0,30 N/mm²
Tensile strength (ISO 8339):	0,56 N/mm²
Ultimate elongation (ISO 8339):	300%
100% Modulus (ISO 8339):	0,32 MPa
Peel strength (ASTM C794):	6,0 N/mm
Service temperature range:	-40°C / +100°C

The values in this table must not be considered as specifications.





# **ALCOSIL**

#### **APPROVALS**

ALCOSIL has been tested and certified by EUROFINS according to:

Regulation or protocol	Conclusion	Version of regulation or protocol
French VOC Regulation	A +	Regulation of March and May 2011 (DEVL1101903D and DEVL1104875A)
French CMR components	Pass	Regulation of April and May 2009 (DEVP0908633A and DEVP0910046A)
Italian CAM Edilizia	Pass	Decree 11 October 2017 (GU n.259 del 6-11-2017)
ABG	Pass	Anforderungen an bauliche Anlagen bezüglich des Gesundheitsschutzes (ABG), Entwurf 31.08.2017/August 2018 (AgBB)
Belgian Regulation	Pass	Royal decree of May 2014 (C-2014/24239)
EMICODE *	EC 1 PLUS	apr-19
Indoor Air Comfort®	Pass	Indoor Air Comfort 6.0 of February 2017
Indoor Air Comfort GOLD®	Pass	Indoor Air Comfort GOLD 6.0 of February 2017
Blue Angel (DE-UZ 123)	Pass	DE-UZ 123 for "Low-Emission Sealants for Interior Use", (January 2019)
BREEAM International	<b>Exemplary Level</b>	BREEAM International New Construction v2.0 (2016)
BREEAM® NOR	Pass	BREEAM-NOR New Construction v1.2 (2019)
LEED	Pass	v 4.1 July 2019

<sup>\*</sup> This test report does not alone entitle to use the protected trademark label EMICODE.

#### Standard compliance

ISO 11600 F-EXT-INT CLASS 25 LM, G- CLASS 25 LM.



**15651-1: F-EXT-INT 25 LM** sealant for façade for interior and exterior application. **EN 15651-2: G LM** sealant used for sealing glazing applications.

### **METHOD OF USE**

**Surface preparation:** the surfaces must be dry and clean. The substrates made from concrete should be free from dust, water repellent materiales and release agents. Metals should be degreased.

**ALCOSIL** has good adhesion to main construction porous substrates, to painted surfaces of metal and wood, to rigid plastics like uPVC and polycarbonate not protected from UV rays.

In presence of surfaces like concrete, aluminium and galvanized steel the use of a suitable Primer may be required.

Considering the wide range of characteristic and nature of painting products and variability of composition and/or finishing of plastics, previous testing of compatibility and preparation is recommended. See table of Primers for silicone sealants.

It is the responsibility of the user to test the compatibility of the sealant with the adjoining materials.

Incompatible substances like coating materials (paints, varnishes and glazes) or organic plasticizer containing rubbers (EPDM, butyl and neoprene) can lead to discoloration or other impairments like loss of adhesion of the sealant.

Materials in direct contact with the applied sealant like cleaning agents and materials in indirect contact like gaseous emissions can damage the sealant in its function or change its appearance.

Because of the multitude of these materials, Fratelli Zucchini S.p.A. cannot make a general statement to the compatibility of materials with the sealant. In case of doubt the user shall conduct appropriate preliminary tests.

The time until complete curing may be extended at lower temperature, lower humidity, increasing film thickness or by low volume of air exchange.

**Recommended joint dimension (see picture):** joint should be designed so that to produce a minimum sealant thickness not below 5 mm. and not over 10 mm.

The thickness of the sealant should be always lower than width.

In butt joints, the width should be at least twice total expected movement, in overlap joints equal or greater.

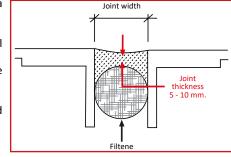
For a correct dimensioning of joint cross section, insert at the back **Filtene**, a closed cell polyethylene foam round profile, available in several diameters.

**APPLICATION:** apply sealant with hand or air operated gun extruding it in a continuous bead and forcing it in contact with joint sides.

**Tooling:** can be carried out in the 10 minutes following the extrusion.

**Solvent wiping:** dirty tools can be solvent wiped with **Solvente ST/512**. After curing **ALCOSIL** can be removed mechanically.

ALCOSIL can't be overpainted.



# ALCOSIL

### **SAFETY AND HEALTH**

See Safety Data Sheet.

# STORAGE STABILITY

- 310 ml. cartridge 9 months from the date of manufacture.
- 600 ml bag. 9 months from the date of manufacture.
- 20 kg drum 6 months from the date of manufacture.

Store the sealed product in the original packaging, in a dry place at a temperature between +5°C and +25°C.

## **PACKAGING**

Code	Colour	Packaging	Unit
1006788	transparent	310 ml. cartridge	24

Other sizes available on request.



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