

ELASTOSIL® eco 7100 P



Finished Sealants

ELASTOSIL® eco 7100 P is a one-component, neutral-curing, low-modulus silicone sealant with outstanding adhesion and long shelf life for construction, glazing and window application, industrial applications and sanitary areas.

ELASTOSIL® eco 7100 P is produced based on a 100% exchange of the fossil-based raw materials by sustainably certified renewable materials.

ELASTOSIL® eco 7100 P cures at room temperature in the presence of atmospheric moisture to give a permanently flexible silicone rubber.

Properties

- suitable for use in sanitary areas
- 100% silicone
- 100% replacement of fossil-based raw materials by renewable raws
- long shelf life
- primerless adhesion to most materials
- non-corrosive to metals
- suitable for alkaline substrates such as concrete, mortar, fibrous cement
- almost odorless
- non-sag
- ready gunnability at low (+5 °C) and high (+40 °C) temperatures
- rapid crosslinking: quickly becomes tack-free
- flexible at low (-40 °C) and high temperatures (+180 °C)
- excellent weatherability
- excellent processing characteristics for professional use

Specific features

- Alkoxy-cure
- Suitable for use in sanitary areas

Technical data

Properties Uncured

Property	Condition	Value	Method
Skin forming time	23 °C 50 % r.h	25 min	-
Density	23 °C	1.03 g/cm ³	ISO 1183-1 A
Consistency ⁽¹⁾	-	non-sag	ISO 7390, profile U 20
Curing rate	-	approx. 3 mm/d	-
Extrusion rate - mass flow	6 bar 23 °C	200 g/min	-

¹23°C

These figures are only intended as a guide and should not be used in preparing specifications.

Properties Cured

Property	Condition	Value	Method
Movement capability	-	25 %	ISO 11600 / EN 15651
Movement capability	-	50 %	ASTM C920
Modulus at 100 % elongation	-	0.38 N/mm ²	ISO 8339-A
Elongation at break	-	> 300 %	ISO 8339-A
Hardness Shore A	-	24	ISO 868
Tear strength	-	4.6	ISO 34 – C
Tensile strength	-	0.7 N/mm ²	ISO 8339-A

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

Applications

- Eco-Products

Application details

Application fields

- sealing of connecting and expansion joints in the construction industry
- glass sealing
- sealing of joints in sanitary areas like e.g. bathrooms and kitchens
- sealing of joints between glazing and supporting structure (frames, transoms, mullions)

Processing

The substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material, dust, dirt, rust, oil and other contaminants. Non-porous substrates should be cleaned with a solvent and a clean, lint-free, cotton cloth. Remove residual solvent before it evaporates with a fresh clean, dry cloth.

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. Even a longer period of time in the darkness white joints may show a slight yellowing. Because of the multitude of these materials, Wacker 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.

The work should only be carried out with sufficient fresh air supply. Wear appropriate protective clothing when processing.

Certification

ELASTOSIL® eco 7100 P is certified and classified according to

- ISO 11600 F+G, class 25 LM
- EN 15651-1, class 25 LM F-EXT-INT-CC
- EN 15651-2, class 25 LM G-CC
- EN 15651-3, class XS1
- DIN 18545-2 class E
- ASTM C920, type S, grade NS, class 50
- EMICODE EC1-PLUS

Adhesion

ELASTOSIL® eco 7100 P exhibits excellent primerless adhesion to most material used for sanitary application, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker on varnished or painted wood

Users must carry out their own tests due to the great variety of substances. The adhesion can be improved in many cases by pretreatment of the substrates with a primer. If adhesion difficulties arise please contact our technical service.

Restrictions on use

ELASTOSIL® eco 7100 P must not be used as a secondary sealant in insulating glass units.

ELASTOSIL® eco 7100 P must not be used for structural glazing bonding.

ELASTOSIL® eco 7100 P is not suitable for use on natural stones, such as marble, granite, quartzite, as it can cause staining.

ELASTOSIL® eco 7100 P is not suitable for the construction of aquaria.

ELASTOSIL® eco 7100 P is not suitable for food contact applications.

ELASTOSIL® eco 7100 P is not recommended for application in permanently wet areas where the joint is strongly or permanently exposed to water, e.g. in swimming pools, please contact our technical service.

ELASTOSIL® eco 7100 P is not suitable for use as a mirror adhesive.

Packaging and storage

Storage

The 'Best use before end' date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

Safety notes

During vulcanization ethanol is released. These vapors should not be inhaled for long periods or in high concentration. Hence, good ventilation of the work place is necessary. Should unvulcanized RTV-1 silicone rubber come into contact with eyes or mucous membranes, the affected area must be rinsed thoroughly with water as irritation will otherwise be caused. Cured silicone rubber, however, can be handled without any risk to health.

Keep away from children.

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

QR Code ELASTOSIL® eco 7100 P



For technical, quality or product safety questions, please contact:

Wacker Chemie AG, Gisela-Stein-Strasse 1, 81671 Munich, Germany
productinformation@wacker.com, www.wacker.com

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies' raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.