

ELASTOSIL[®] eco 7000 N



Finished Sealants

ELASTOSIL[®] eco 7000 N is a one-component, neutral-curing, low-modulus silicone sealant with outstanding adhesion and long shelf life for construction, glazing and window application as well as industrial applications.

ELASTOSIL[®] eco 7000 N is produced based on 100% exchange of the fossil-based raw materials by sustainably certified renewable materials

ELASTOSIL[®] eco 7000 N cures at room temperature in the presence of atmospheric moisture to give a permanently flexible silicone rubber.

Properties

- 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

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	23 °C 50 % r.h	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

After 4 weeks' storage at 23°C / 50 % r.h.

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 N/mm	ISO 34, method C
Tensile strength	-	0.7 N/mm ²	ISO 8339-A

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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 building industry
- glass and windows construction
- sealing of joints between glazing and supporting structure (frames, transoms, mullions)
- Industrial application as sealant in the automotive, aircraft and shipbuilding industries

Processing

The substrate areas that will be in contact with the sealant must be clean, dry and free of all loose material such as 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. Paints 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 or adhesion 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.

Specification

ELASTOSIL® eco 7000 N is certified and classified according to

- ISO 11600 F/G, class 25 LM
- EN 15651-1, class 25LM F-EXT-INT-CC
- EN 15651-2, class 25LM G-CC
- BS 15651-1, class 25LM F-EXT-INT-CC
- BS 15651-2, class 25LM G-CC
- DIN 18545-2, class E
- SNJF F / V, class 25E
- ASTM C920, Type S, Grade NS, Class 50
- EMICODE EC1 PLUS

Adhesion

ELASTOSIL® eco 7000 N exhibits excellent primerless adhesion to many non-porous siliceous materials, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker varnished or painted wood as well as many plastics.

Users must carry out their own tests due to the great variety of substrates. 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 7000 N must not be used for insulating glass applications

ELASTOSIL® eco 7000 N must not be used for structural glazing or bonding.

ELASTOSIL® eco 7000 N is not recommended for use on natural stones, such as marble, granite, quartzite, as it can cause staining.

ELASTOSIL® eco 7000 N is not recommended for the construction of aquaria.

ELASTOSIL® eco 7000 N is not suitable for food grade applications where the joints are likely to come in contact with food.

ELASTOSIL® eco 7000 N is not recommended for application in permanently wet areas where the joint is strongly or permanently exposed to water, e.g. in swimming pools or public sanitary facilities, please contact our technical service.

ELASTOSIL® eco 7000 N is not suitable for mirror mounting.

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 7000 N



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

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