ELASTOSIL® 4000

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Finished Sealants

ELASTOSIL® 4000 is a one-component, acid-curing, low-modulus silicone sealant with outstanding adhesion and long shelf life for construction, glazing and window application as well as industrial applications.
ELASTOSIL® 4000 cures at room temperature in the presence of atmospheric moisture to give a permanently flexible silicone rubber.

Properties

- 100% silicone
- non-sag
- ready gunnability at low (+ 5 °C) and high (+ 40 °C) temperatures
- low shrinkage on curing
- flexible at low (-40 °C) and high temperatures (+180 °C)
- low-modulus: better adhesion and higher safety
- rapid crosslinking: quickly becomes tack-free
- adheres excellently to glass, vitrified surfaces, ceramic tiles, selected plastics and most coatings
- excellent tooling properties
- long shelf life

Technical data

Properties Uncured

Property	Condition	Value	Method
Skin forming time	23 °C | 50 % r.h	20 min	-
Density	23 °C	1.02 g/cm^3	ISO 1183-1 A
Consistency[(1)]	-	non-sag	ISO 7390, profile U 20
Extrusion rate - mass flow	6 bar | 23 °C	450 g/min	-

[1]23°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
Modulus at 100 % elongation	-	0.35 N/mm^2	ISO 8339-A
Elongation at break	-	250 %	ISO 8339
Hardness Shore A	-	20	ISO 868
Tear strength	-	4.2 N/mm	ISO 34, method C
Tensile strength	-	0.6 N/mm^2	ISO 8339

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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.

ELASTOSIL® silicone polymers and fillers

Applications

- ELASTOSIL® - Ready-to-Use Construction Sealants
- Sealants
- Silicone Sealants

Application details

Application fields

- Glass and windows construction
- Sealing of joints between glazing and supporting structure (frame, transoms, mullions)
- Industrial application as sealant in the automotive, aircraft and shipbuilding industries

Processing

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 with a fresh clean, dry cloth.
It is the user's responsibility 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. 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 use of tooling agents should be avoided if possible. Otherwise, water or a diluted solution of a little neutral soap or alcohol in water should be sparingly applied

Certification

ELASTOSIL® 4000 is certified and classified in accordance to

- ISO 11600 G - Class 25 LM
- EN 15651-1 - Class 25 LM F-INT-EXT-CC
- EN 15651-2 - Class 25 LM G-CC
- DIN 18545-2 - Class E
- ASTM C 920 - Type S, Grade NS, Class 25
- EMICODE EC-1 PLUS

Adhesion

ELASTOSIL® 4000 exhibits excellent primerless adhesion to most non-porous siliceous substrates, e.g. glass, tiles, ceramics, enamel, glazed tiles, clinker and selected plastics as well as lacquered, glazed or impregnated 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 in use

ELASTOSIL® 4000 must not be used for insulating glass applications.
ELASTOSIL® 4000 should not be used on substrates such as marble, concrete, fibrous cement and mortar, as the product releases acetic acid during vulcanization.
ELASTOSIL® 4000 should not be used in contact with metals such as lead, copper, brass or zinc due to corrosion.
ELASTOSIL® 4000 should not be used on substrates such as concrete, fibrous cement, and mortar, as the product releases acetic acid during.
ELASTOSIL® 4000 may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene.
ELASTOSIL® 4000 is not recommended for sealing of aquaria, please use our ELASTOSIL® 4300.
ELASTOSIL® 4000 is not recommended for use on natural stone, such as marble, granite, quartzite, as it can cause staining.
ELASTOSIL® 4000 is not recommended for structural glazing bonding.
ELASTOSIL® 4000 is not recommended for sealing of aquaria or for longer-term use under water.
ELASTOSIL® 4000 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 acetic acid 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 uncured 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® 4000

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

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