

ELASTOSIL® 4300



Finished Sealants

ELASTOSIL® 4300 is a one-part, acid-curing, silicone sealant with excellent mechanical properties and high curing rate for construction of aquariums and industrial applications.

ELASTOSIL® 4300 cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

Properties

- 100% silicone
- especially adjusted for bonding of aquaria
- high mechanical strength
- non-sag
- very fast crosslinking: quickly becomes tack-free
- ready gunnability at low (+ 5 °C) and high (+ 40 °C) temperatures
- low shrinkage on curing
- flexible at low (-40 °C) and high temperatures (+150 °C)
- good processing properties
- extra high paste viscosity

Specific features

- Acetoxy-cure

Technical data

Properties Uncured

Property	Condition	Value	Method
Skin forming time	23 °C 50 % r.h	15 min	-
Density	23 °C	1.03 g/cm ³	ISO 1183-1 A
Consistency ⁽¹⁾	-	non-sag	ISO 7390, profile U 20
Curing time	23.0 °C 50.0 % r.h	3.0 mm/d	-
Extrusion rate - mass flow	6 bar 23 °C	250 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
Modulus at 100 % elongation	-	0.55 N/mm ²	ISO 8339-A
Combined tension and shear resistance	-	1.6 N/mm ²	DIN 32622
Elongation at break	-	200 %	ISO 8339
Hardness Shore A	-	22	ISO 868
Tear strength	-	6.1 N/mm	ISO 34, method C
Tensile strength	-	0.80 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.

Applications

- Ready-to-Use Silicone Sealants - Special Applications
- Sealants
- Silicone Sealants

Application details

Application fields

- sealing of joints exposed to high mechanical loads
- sealing of joints which need to quickly build up mechanical strength
- suitable for the construction of aquariums which meet the requirements of DIN 32 622. The bond thickness must be at least 1 mm. During curing the temperature should be between +15 °C and +40 °C
- suitable for use in glazing and industrial applications

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 with a fresh clean, dry cloth.

Certification

ELASTOSIL® 4300 is certified and classified according to

- - DIN 32622
- - ISO 11600, Klasse G 20 LM

Adhesion

ELASTOSIL® 4300 exhibits excellent primerless adhesion to most non-porous siliceous material, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker. 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® 4300 should not be used on substrates such as concrete, fibrous cement and mortar, as the product releases acetic acid during curing.

ELASTOSIL® 4300 should not be used in contact with metals such as lead, copper, brass or zinc as corrosion will result.

ELASTOSIL® 4300 may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene.

ELASTOSIL® 4300 is not recommended for use on natural stone, such as marble, granite, quartzite, as it can cause staining.

ELASTOSIL® 4300 is not recommended for structural glazing bonding.

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® 4300



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

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