

# ELASTOSIL<sup>®</sup> 4710



## Finished Sealants

ELASTOSIL<sup>®</sup> 4710 is a one-component, acid-curing silicone sealant for sealing of joints in food-contact applications. ELASTOSIL<sup>®</sup> 4710 cures at room temperature in the presence of atmospheric moisture to give a permanently flexible silicone rubber.

## Properties

- 100% silicone
- especially adapted for food contact
- certified by NSF according ANSI 51
- suitable for food contact per US Food and Drug Administration Regulations No. 21 CFR 177.1210 and 177.2600
- non-sag
- good gunability at low (+5 °C) and high (+40 °C) temperatures
- low-shrinkage during vulcanization
- remains flexible at low (-40 °C) and high temperatures (+180 °C)
- rapid crosslinking: quickly becomes tack-free
- long shelf life
- excellent adhesion to glass, vitrified surfaces, ceramic tiles, selected plastics and coatings

## 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 <sup>3</sup>	ISO 1183-1 A
Consistency <sup>(1)</sup>	-	non-sag	ISO 7390, profile U 20
Extrusion rate - mass flow	6 bar   23 °C	450 g/min	-

<sup>1</sup>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	-	0.37 N/mm <sup>2</sup>	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	-	0.60 N/mm <sup>2</sup>	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 expansion and connection joints
- sealing in areas where food and drinking water contact is likely
- sealant for silo and container construction

### 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.

### Certification

ELASTOSIL® 4710 is certified and classified according to

- NSF ANSI 51
- Reg. EU/1935/2004
- ISEGA (62. Mtl. BfR)
- US FDAR No. 21 CFR 177.1210 und 177.2600
- ISO 11600 G - Class 25 LM
- DIN 18545-2 - Class E
- TT-S-00230C - Type II, Class A
- BS6920 WRAS

### Adhesion

ELASTOSIL® 4710 adheres to most non-porous siliceous material, e.g. glass, tiles, ceramics, enamel, glazed tiles and clinker, impregnated, varnished or painted wood and selected plastics.

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

### Restrictions on use

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.

ELASTOSIL® 4710 must not be used for insulating glass applications.

ELASTOSIL® 4710 should not be used on substrates such as marble, concrete, fibrous cement, and mortar, as the product releases acetic acid during vulcanization.

ELASTOSIL® 4710 should not be used in contact with metals such as lead, copper, brass or zinc due to corrosion.

ELASTOSIL® 4710 may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene.

ELASTOSIL® 4710 is not suitable for applications involving contact with natural stone, such as marble, granite, quartzite as it can cause staining.

ELASTOSIL® 4710 is not recommended for structural glazing applications.

ELASTOSIL® 4710 is not recommended for sealing of aquaria or for longer-term use under water.

ELASTOSIL® 4710 is not suitable for use as a mirror adhesive.

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.

## 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 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® 4710



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

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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.