

# WACKER® 121 - AQUARIUM

## WACKER Brand

WACKER® 121 - AQUARIUM is a one-part, acid-curing, silicone sealant with excellent mechanical properties and high curing rate for construction of aquariums and industrial applications. WACKER® 121 - AQUARIUM cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

## Properties

### Special features

- long shelf life
- non-sag
- excellent tooling characteristics for professional use
- readily gunnable both at low (+5 °C) and high (+40 °C) temperatures
- rapid crosslinking: quickly becomes tack-free and crack resistant
- flexible at low (-40 °C) and high temperatures (+150 °C) following cure
- low shrinkage on curing
- special high-viscosity paste
- excellent mechanical properties

## Technical data

### General Characteristics

Property	Condition	Value	Method
Density	23 °C   1013 hPa	1.03 g/cm <sup>3</sup>	ISO 1183-1 A

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

## Properties Uncured

Property	Condition	Value	Method
Skin forming time	23 °C   50 % r.h	15 min	-
Consistency <sup>(1)</sup>	-	non-sag	ISO 7390, profile U 20
Extrusion rate - mass flow	23 °C	250 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	-	25.0 %	ISO 9047
Modulus at 100 % elongation (S2-dumbbell)	-	0.40 N/mm <sup>2</sup>	ISO 37
Modulus at 100 % elongation (joint)	-	0.50 N/mm <sup>2</sup>	ISO 8339-A
Curing time	23 °C   50 % r.h	3.0 mm/d	-
Hardness Shore A	-	22	ISO 868
Tensile strength <sup>(1)</sup>	-	0.70 N/mm <sup>2</sup>	ISO 8339
Tensile strength <sup>(2)</sup>	-	1.6 N/mm <sup>2</sup>	ISO 37
Ultimate elongation (S2-dumbbell)	-	500 %	ISO 8339-A
Ultimate elongation (joint)	-	150 %	ISO 8339-A

<sup>1</sup>(joint)

<sup>2</sup>(S2-dumbbell)

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

- Sealants
- Silicone Sealants WACKER Brand
- Specific Application

## Application details

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 clean, lint-free, cotton cloth. Remove residual solvent before it evaporates with a fresh clean, dry cloth. For application from cartridges cut thread open, fix nozzle on top and cut to required bead size. The sealant can be applied in beads or layers. It requires moisture in order to cure.

The curing time can take longer at lower temperatures, lower humidity or by low volume of air exchange.

Restrictions on use WACKER® 121 - AQUARIUM should not be used on substrates such as marble, concrete, fibrous cement and mortar, as the product releases acetic acid during curing.

WACKER® 121 - AQUARIUM should not be used in contact with metals such as lead, copper, brass or zinc due to corrosion.

WACKER® 121 - AQUARIUM may be discolored in contact with some organic elastomers, e.g. EPDM and neoprene.

WACKER® 121 - AQUARIUM is not suitable for applications involving contact with natural stone, such as marble, granite, quartzite, as it can cause staining.

WACKER® 121 - AQUARIUM is not suitable for insulating glass applications.

WACKER® 121 - AQUARIUM should not be used on pre-stressed polyacrylate elements as it may cause environmental stress cracking.

It is the responsibility of the user to test the compatibility of the sealant with the adjoining materials. Incompatible substances like coatings or organic plasticizers can lead to discoloration of the sealant. Cleaning agents and gaseous emissions can damage the sealant in its function or change its appearance. WACKER cannot make a general statement to the compatibility of all these varying materials with the sealant. In case of doubt the user shall conduct appropriate preliminary tests.

- 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 and for the construction of silos and containers

Restrictions on use WACKER® 121 - AQUARIUM should not be used on substrates such as marble, concrete, fibrous cement and mortar, as the product releases acetic acid during curing. WACKER® 121 - AQUARIUM should not be used in contact with metals such as lead, copper, brass or zinc as corrosion will result. WACKER® 121 - AQUARIUM may be discolored in contact with some organic elastomers, e.g. EPDM, APTK and neoprene. WACKER® 121 - AQUARIUM is not recommended for use on natural stone, such as marble, granite, quartzite, as it can cause staining. WACKER® 121 - AQUARIUM is not recommended for structural glazing bonding.

### Adhesion

WACKER® 121 - AQUARIUM 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.

## Packaging and storage

### Packaging

WACKER® 121 - AQUARIUM is usually supplied in standard size cartridges that fit all standard caulking guns.

### 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

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>.

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. 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>.

### Additional information

WACKER® 121 - AQUARIUM meets following specifications:

- DIN 32622 TÜV Rheinland (Rhineland Technical Inspection Authority):

Approved as sealing compound for the

construction of aquariums (R60007911 dated July 13,2004)

- ASTM C 910, type S, grade NS, class 25, use NT, G and A

- ISO 11600-G, Class 20 HM

## QR Code WACKER® 121 - AQUARIUM



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

**Wacker Chemie AG**, Gisela-Stein-Strasse 1, 81671 Munich, Germany

[productinformation@wacker.com](mailto:productinformation@wacker.com), [www.wacker.com](http://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.