

410 AQUARIUM

Acid curing 1-component silicone sealant



TESTS, COMPLIANCE WITH STANDARDS

Test certificate based on Austrian standard ÖNORM B 5014-1:2016, DVGW (German standardization body for the gas and water industry) worksheet W270 and KTW (contact with drinking water) guidelines.

DIN 32622, Section 4.4.2

Tested for application in the food industry.

Meets the French VOC-requirements for class A+

TECHNICAL DATA

Basis: Acid curing acetate system

Skin over time: ~ 8 min. (23°C/50 % relative humidity)

Curing time: ~3 mm/24 hours (at +23°C / 50 % relative humidity)

Density: ~ 1.01 (EN ISO 1183-1)

Shore hardness: ~ 26 (EN ISO 868)

Shrinkage: ~ 3% (EN ISO 10563)

Sag resistance: <3

Tear strength: ~ 5.94 N/mm (ISO 34-1)

Stress at break: ~ 0.61 N/mm² (EN ISO 8339)

Modulus: ~ 0.5 N/mm² (EN ISO 8339)

Shear strength (transparent): ~ 1,25 N/mm² (DIN 52455-3)

Shear strength (coloured): ~ 1,44 N/mm² (DIN 52455-3)

Elongation at break: ~ 210% (EN ISO 8339)

Movement capability: 25%

Processing temperature (substrate, environment): +5°C to + 35°C

Temperature resistance: - 50°C to + 180°C

Storage life: 12 months in a cool and dry place

Colours: black, transparent

Packaging: 310ml-cartridges, alternative packaging upon request



CHARACTERISTICS

410 AQUARIUM is resistant to algae and seawater as well as to alkaline and acidic vapours in terrariums. The product is physiologically safe when cured. Furthermore, 410 AQUARIUM is permanently resistant to chlorinated water in swimming pools

and temporarily resistant to commercially available detergents and disinfectants (for the duration of cleaning). The product is compatible with laminated safety glass.

APPLICATION

410 AQUARIUM is a quickly curing acetate system without fungicidal agents for watertight gluing of full-glass aquariums

and full glass structures. It is suitable for building terrariums. 410 AQUARIUM is tested for application in the food industry.

MEETS THE REQUIREMENTS OF IVD-INSTRUCTION SHEET

No. 21: Elastic sealing of joints in the food industry (available in German only)

PROCESSING

Good and durable glue joints with excellent adhesion even when subjected to extreme pressure are guaranteed when cleaning the glass thoroughly before sealing. In order to prevent the sealant from peeling or detaching and to avoid cracks in the sealant make sure that the sealant has vulcanised/cured completely before filling aquariums or subjecting them to

vibration e.g. during transportation. In case of a joint depth of approx. 10 mm the required curing time is 2 weeks. Before using the silicone in layers with a thickness of more than 10 mm get in touch with our application engineering department. The thickness of glass must be chosen according to the capacity or dimensions of the aquarium.

LIMITATIONS OF APPLICATION

When using the product with metals, in particular brass, copper,

lead, zinc, etc. corrosion occurs due to the acidic acid released

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during curing. Aquariums must be rinsed thoroughly with water before being used. Containers with a capacity of 200 litres or more must be reinforced by a structural frame. When using a primer take into account its open time and the instructions for proper application. Not suitable for gluing Plexiglas® aquariums. For building large aquariums we recommend our

adhesive "670 2-K-KLEBER", and encourage you to get in touch with our application engineering department. Avoid contact with materials containing plasticisers or bitumen. 410 AQUARIUM is not suitable for gluing mirrors and not suitable for sealing marble and other natural stone joints.

SAFETY ADVICE

Consult the current EC Safety Data Sheet which is available at any time on our website at www.ramsauer.at.

HEALTH PROTECTION

Avoid swallowing and prolonged or repeated skin contact. Since 410 AQUARIUM releases low quantities of acetic acid during curing it must be used exclusively in sufficiently

ventilated rooms. Keep out of the reach of children. Consult our Safety Data Sheet!

ADVICE FOR APPLICATION

Ensure sufficient ventilation during processing and curing. In view of the large number of factors which may affect processing and application the user must always try the specific application in an experiment before using the product. Take into account the expiry date of the product. 1-component silicone sealants are not suitable for full surface bonding. The curing time

increases with the thickness of the layer. Before using the 1-component silicone sealant in layers with a thickness of more than 15 mm get in touch with our application engineering department. Storage and/or transportation of products at increased temperature/air humidity for a prolonged period of time (several weeks) may result in a reduction of storage life and/or changes of characteristics of the product.

GROUNDING TABLE

Glass	+
Tiles	+
Pine wood	RP 70
Concrete, wet-ground	-
Concrete, according to form work	-
Steel DC 04	+
Hot dip galvanised steel	+
High grade steel	RP 140 / RP 40
Zinc	-
Aluminium	+
Aluminium AlMg1	+
Aluminium AlCuMg1	+
Aluminium 6016	+
Aluminium anodised	+
Brass MS 63 hardness F 37	-
Rigid PVC Kömadur ES	RP 100 / RP 105
PVC plasticised	RP 100 / RP 105
PC Makrolon Makroform 099	-
Polyacryl PMMA XT 20070 Röhm	-
Polystyrene PS Iroplast	RP 100 / RP 105
ABS Metzoplast ABS 7 H	RP 100
PET	+
PU blend quality	+
Copper	-
Polycarbonate	-
PMMA Röhm sanitary quality	-
Mirrors	-
Natural stone	-

Legend:

- + = adheres well without a primer
- = not suitable
- RP = Ramsauer primer

This table is based on adhesion tests with test solids of Rocholl corporation under laboratory conditions. Under field conditions the adhesion characteristics are dependent on a variety of external factors (weather, impurities, burdens, etc.). Therefore this table serves for guidance only and does not constitute any binding statement. For more information get in touch with our application engineering department.

LIABILITY FOR DEFECTS

The information provided including but not limited to the proposals for processing and using our products is based on our knowledge and experience, usually at the time of going into print. The results of work may deviate from this information depending on the specific circumstances, in particular with respect to substrates, processing and environmental conditions. Therefore, neither this information nor any oral counselling shall constitute warranty or give rise to any liability

on whatever legal ground for any specific result of work, unless we acted intentionally or by gross negligence. Ramsauer warrants that its products will have the technical characteristics according to the Technical Data Sheets up to their expiry date. Product users must consult the latest data sheet which is available upon request. Our current General Terms and Conditions apply which are available for download on our website www.ramsauer.at.



QUALITY YOU CAN RELY ON

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