

Nanten Matacryn

Fast curing acrylic-based waterproofing agent for demanding concrete structures

PRODUCT TYPE

Fast curing two-component SILKO-approved elastic polyurethane modified acrylic coating and waterproofing agent. Painting supplies group 52.5 (RT-classification).

APPLICATION

Used as a bridging compound for cracked surfaces and/or waterproofing agent in areas with extreme temperature variations. Applications include pedestrian bridges, balconies, parking levels, etc. The coating has good resistance to mechanical and chemical stress and maintains its elasticity also at very low temperatures. For waterproofing, the membrane thickness should be at least 1.5 mm. (BLY 10/ by 49).

PROPERTIES

SILKO-approval 302/200220/42.

Waterproofing agent for the concrete structures of bridges according to SILKO guideline 3.815 3. Due to its short reaction time the necessary works can be completed in a matter of hours.

TECHNICAL DATA

Mixing ratio

Use Nanten Acrylic Hardener (50% dibenzoyl peroxide) as the hardener/catalyst. Hardener quantity based on processing temperature:

Hardener quantity based on temperature

1 dl Acrylic Hardener = 64 g

+ 30 °C	1 weight -%
+ 20 °C	2 weight -%
+ 10 °C	4 weight -%
+ 3 °C	5 weight -%

Material consumption

Matacryn resin approx. 1.9 kg/m² with membrane thickness 1.5 mm.

Density (+ 25°C) 1,23 kg/l.

Viscosity 100 - 130 mPas (DIN 53214).

Application temperature +3°C ...+30°C.

Application time (+ 20°C)

About 15 minutes when spread on the concrete base. With higher temperatures the time is shorter.

Drying time (+ 20°C)

Fully loadable after approx. 3 hours. Ensure good ventilation in the room.

Waiting time (+ 20°C) Priming – Coating approx. 1 h

TECHNICAL PROPERTIES

Tensile strength 11 N/mm² DIN 53455

Breakage elongation 400 % DIN 53455

Water tightness 3 bar / 24 h EN 1928 B

Final hardness (+ 20°C) Shore D 55

Dilution Do not dilute

Cleaning of tools Nanten Acrylic Wash.

Storage

+ 5°C...+ 20°C, storage time 6 months at maximum. Store in a warm room, in tightly closed original containers.

DIRECTIONS FOR USE

Surface preparation

New concrete floor

Remove laitance and any non-cured cement by surface grinding, shot-blasting, sand-blasting or milling. Surface should be sanded down to fully hardened aggregate concrete. All loose material should be carefully removed with a vacuum cleaner/brush.

Old concrete floor

Remove laitance and deteriorated concrete by surface grinding, shot-blasting or milling. All loose material should be carefully removed with a vacuum cleaner/brush. Soiled substrates should be washed with synthetic detergent and rinsed with water before sanding. If the substrate is soiled with oil or grease, use emulsifying solvent-based detergent and water. Oil and grease which have penetrated deep in the substrate are removed by burning or by milling off the soiled surface layer.

Surface requirements and application conditions

Concrete strength class should be at least C25/30 (K30 by old classification) and wear resistance class 3. Relative humidity in concrete max. 95%. The temperature of the substrate to be coated should be above dew point by at least + 3°C. Relative humidity should be below 90% during the coating application and drying. Do not apply in foggy conditions.

Filling

Waterproofing is ensured by cutting a 2–3 cm deep and 5 cm wide bevel around floor drains, which is filled with a mixture of acrylic binder and filler sand before coating application. Use the same method in other similar joints. The acrylic filler is used for repairing possible cavities and in similar filling work.

Priming

Surface is primed with Nanten Acrylic Primer or with Nanten Matabryl Bitu Primer in bridge structures and demanding applications. Scatter roughening sand on top of fresh primer to ensure adhesion of the Matabryl coating.

Mixing of components

Calculate the required amount of Matabryl coating, considering the surface area to be coated and the mixture application time. Note the effect of temperature on the quantity of the hardener. First stir the resin in its own container. Add the required quantity of catalyst powder to the mixing container and mix with a mixer at low speed for about 2 minutes. Avoid mixing air into the compound.

Coating

When the compound has even consistency, pour it to the base in a strip and spread with a variable trowel until achieving the required layer thickness. The surface is immediately finished with a steel trowel. Cured compound is varnished with Nanten Acrylic Sealer 319 or 304. If the coating is applied as an intermediate layer, apply a new layer of acrylic primer and during the work spread adhesive sand onto the primer for further treatment. Ensure efficient ventilation in the room. Poor ventilation slows down drying of the product.

Even though the technical details of the product description are based on our best knowledge and experience, the above-named information should always be regarded as indicative. The user should make sure that the product is suitable for the application. If working contrary to these instructions, the user is solely responsible for any possible resulting damages and consequences.