

# Nanten Matacryl® Bitu-Primer

## Fast curing acrylic-based sealing compound for concrete structures

### PRODUCT TYPE

SILKO approved fast curing two-component methylmetacrylate based low viscosity primer/sealing compound.

### APPLICATION

Priming and sealing compound for bridge structures under asphalt and bitumen based waterproofing and coating systems. Excellent adhesion to concrete and metal substrates. Forms fast a tight substrate for bitumen based coatings.

### PROPERTIES

#### SILKO approval 565/090/2012

Sealing compound for insulating substrate according to SILKO guideline 3.252 3. Extremely fast curing sealing compound under bitumen roll materials and asphalt. Seals concrete structures and improves the adhesion of waterproofing compounds. Due to its short reaction time the necessary works can be completed in a matter of hours. Can be spread on concrete which is only a week old.

### 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 o-%
+ 3 °C	5 weight -%

#### Material consumption

Should be >1.1 kg/m<sup>2</sup> according to SILKO guidelines

Priming approx. 0.5 kg/m<sup>2</sup>

Sealing approx. 0.6 kg/m<sup>2</sup>

Scatter quartz sand on top of the primer approx. 1 kg /m<sup>2</sup>, max. grain size Ø1.2 mm.

**Colour** Slightly red.

**Package** 20 kg tin container.

#### Application time (+20°C)

About 15 minutes when spread on the base. Curing time becomes shorter with higher temperatures.

**Application temperature** +0°C ...+30°C.

**Drying time (+ 20°C)** Curing time 60 - 90 minutes

**Waiting time (+ 20°C)** Primer – sealing approx. 1 h

**Application** Spread with a roller / rubber trowel.

**Dilution** Do not dilute the product.

**Cleaning of tools** Nanten Acrylic Wash.

#### Storage

+ 5°C...+ 20°C, max. storage time 6 months. Store in tightly closed original containers.

### TECHNICAL PROPERTIES

**Density** 1.0 kg/dm<sup>3</sup> (+ 25°C DIN 53217)

#### Viscosity (+ 25°C)

100 – 160 mPas (+ 25°C DIN 53018)

#### Adhesive strength

Concrete, dry	> 3,0 MPa
Concrete, moist	> 2,5 MPa
Steel	> 4,0 MPa

#### VOC (calculated)

VOC 0 g /l. EU VOC 2004/42 EC (cat. A/j) max. 500 g /l.

### DIRECTIONS FOR USE

#### Surface requirements and application conditions

Concrete strength class should be at least C25/30 and wear resistance class 3. Relative humidity in concrete below 8 weight-%. The temperature of the substrate to be coated should be above dew point by at least + 3°C. Relative humidity should be below 80% during the coating application and drying. Do not apply the coating while temperature is rising.

#### Surface preparation

##### New concrete base

Remove laitance and any non-cured cement by surface grinding, shot-blasting, sand-blasting or milling. All loose material should be carefully removed with a vacuum cleaner/brush.

##### Old concrete base

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.

### Patches and joints

All visible hollows and cracks should be filled prior to sealing work with an acrylic filler made of acrylic binder and thickening fibre or with a cement based patching compound which has sufficient tensile and compressive strength. Joints to other structures are built according to joint details provided in Coating guidelines for concrete floors 2010 by 54 /BLY12.

### Mixing of components

Calculate the amount of prepared mixture, considering the surface area to be coated and the mixture application time. Note the effect of temperature on the quantity of the hardener (Nanten Acrylic Hardener). First stir the resin in its own container and add the required quantity of hardener to the resin. Mix with a mixer at low speed for about 2 minutes. Avoid mixing air into the compound.

### Priming

Mix Bitu Primer properly, pour it to the base in a strip and spread with a rubber trowel and finally roll with a short-hair roller. Consumption approx. 0.5 kg/m<sup>2</sup>. Scatter roughening sand (0.6 – 1.2 mm) on top of the fresh primer approx. 1 kg /m<sup>2</sup>. Let the primer dry 30-60 minutes, depending on conditions.

### Sealing

Mix Bitu Primer in a quantity sufficient for the area and add the catalyst powder to the mixing container, following the table above. Pour the mixed Bitu Primer to the base in a strip and spread with a rubber trowel and finally roll with a short-hair roller. Consumption approx. 0.6 kg /m<sup>2</sup>.

### Repeated application

In case voids are detected with a spark test, the application can be repeated for the relevant areas, provided that the areas are clean and dry.

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.