

Nanten Acrylic 216

Elastic all-round acrylic binder suitable for bridging cracks

PRODUCT TYPE

Nanten Acrylic 216 is a polyurethane modified binder for methylmetacrylate based acrylic coating compounds.

Used also in combination with Nanten Acrylic 20 N to increase the elasticity of grind surfacing compounds. Maintains its elasticity and bridging capacity also at low temperatures. The product contains no water soluble plasticizers. The coating contains no volatile organic compounds (VOC). Painting supplies group 52.9 (RT-classification).

APPLICATION

Floors exposed to high mechanical loads, impacts and temperature variations that cause structural changes in the substrate. Used as an elastic 1-1.5 mm 'membrane layer' under acrylic coatings to improve the durability of acrylic creed floors in demanding conditions. Can be installed at low temperatures. Short drying periods contribute to faster recommissioning of premises. Outdoors Acrylic 216 is used as a binder in coating performed by the broadcasting method. Parking levels, loading bays, terraces and outdoor corridors are the most typical application environments for elastic acrylic coatings.

PROPERTIES

Fast curing high-viscosity binder for Nanten acrylic coating compounds. Resilience class BC5- Mec /by 54/BLY 12).

TECHNICAL DATA

Colours

Colourless, coating colour is generated with Nanten colour sands.

Material consumption

3 – 4 mm layer thickness applied with broadcasting method requires about 1.7 kg/m of resin² and about 6 kg/m of filler sand 2 h (mixing ratio about 1 : 3 by weight and 1 : 2 by volume). Filler sand is coloured quartz sand.

Mixing ratio

Use Nanten Acrylic Hardener as the hardening agent; quantity of the hardener depends on the processing temperature. 1 dl hardener = 64 g.

Hardener quantity	+ 30°C 1 weight-%
according to temperature	+ 20°C 2 weight-%
	+ 10°C 4 weight-%
	+ 3°C 5 weight-%

Package

Supplied in 20 l tin containers and 180 kg barrels.

Application time (+ 20°C)

Approx. 15 minutes after spreading on the floor. With higher temperatures the time is shorter.

Application temperature + 3 °C + 30 °C.

Drying time (+ 20 °C)

Surface can be varnished in about 60 minutes. Fully loadable after approx. 2 hours.

Application method

Spread with a variable trowel and finish with a steel trowel.

Dilution Do not dilute.

Cleaning of tools

Clean the tools with e.g. methylmetacrylate (MMA).

Storage

+ 5°C ...+ 20°C, max. storage time 6 months. Store in a warm room, in tightly sealed original containers.

TECHNICAL PROPERTIES

Density (+ 25°C) Density 0,99 kg /l, DIN 53217.

Viscosity (+ 25°C) 620 - 680 mPas, DIN 53018.

Breakage elongation (+ 20°C) 260 %.

Breakage elongation (0°C) 190 %.

Compression strength Coating method > 82 MPa.

Adhesive strength > 2,5 MPa.

Tensile strength (+ 20°C) 10,5 MPa.

VOC

VOC in working mixture < 0 g /l. EU VOC 2004/42/EC (cat A/j) max. 500 g/l (2010).

DIRECTIONS FOR USE

Surface requirements and application conditions.

Concrete strength class should be at least C25/C30 and wear resistance class 3. Concrete relative humidity should be below 95% and surface temperature at least 3°C above dew point. During the work ensure good ventilation and relative air humidity < 80% in the room. Smell generated during the work can be removed by means of underpressure.

Preparation of surface for priming

New concrete floor

Remove laitance and any non-cured cement by surface grinding, shot-blasting or milling.

All loose material which lowers adhesion should be cleared away and cement dust carefully removed with a vacuum cleaner.

Old concrete floor

Remove laitance and deteriorated concrete by surface grinding, shot-blasting or milling. All loose material which lowers adhesion should be cleared away and cement dust carefully removed with a vacuum cleaner. Soiled floors should be washed and rinsed with synthetic detergent before any works on the substrate.

Remove completely any old films of paint in the substrate.

Filling

Small hollows and cracks should be cleaned and filled with acrylic filler made of acrylic binder and thickening fibre (Sylothix). Larger and more extensive filling, levelling and pouring can be performed with a filling/levelling mixture made of Nanten Acrylic 20 N binder and filler sand. Thickness of bulk material cast in one layer should not exceed 15 mm.

Mixing of components

First mix the required quantity of Nanten Acrylic 216, estimate the effect of temperature on the required quantity of hardener and add the hardener into the mixing container. Continue mixing for about two minutes.

Coating

Grind surfacing is applied on a substrate processed with Nanten Acrylic Primer (101 or 107). Mix Nanten Acrylic 216 and the filler sand properly, pour the mixture to the floor in a strip and spread with a variable trowel until achieving the required layer thickness.

The surface is immediately finished with a steel trowel.

With the broadcast method, selected filler sand is scattered on the Acrylic. The Acrylic is filled with cast sand and after the coating has cured, all excess sand is swept away. When the elastic Acrylic 216 is used as intermediate/membrane layer, it is spread over a primed area with 1-1.5 mm layer thickness. Before further processing we recommend re-application of Nanten Primer to ensure the adhesion of the actual coating layer.

Nanten Acrylic grindable renders are varnished with a surface sealer suitable for the application environment: Nanten Acrylic Sealer 304 or Sealer 319.

APPLICATION SAFETY:

See [www.nanten.fi / products / material safety data sheets](http://www.nanten.fi/products/material%20safety%20data%20sheets).

CE

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1119 -CPD- 1190	
N 1504-2:2004	
Coating/screed	
Abrasion resistance	mass loss < 3000 mg
Capillary absorption and permeability to water	w < 0,1 kg/m ² xh ^{0,5}
Impact resistance	class I < 4 Nm
Adhesion strength by pull-off test	> 2,0 N/mm ²
Reaction to fire B(fl) - s1	bfl-s1
Permeability to CO ₂	sd > 50 m
Permeability to water vapour	Class III
Using Primer 101 and Sealer 319	

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.