

Nanten Acrylic 20 N

High-quality acrylic binder for acrylic coating compounds

PRODUCT TYPE

Nanten Acrylic 20 N is a binder for methylmetacrylate based acrylic coating compounds. Suitable for majority of environments in production and storage premises of various industries. As it is hygienic, acrylic is excellent for the premises of foodstuff and process industries and for professional kitchens.

The coating contains no volatile organic compounds (VOC).
Painting supplies group 5.9 (RT-classification).

APPLICATION

Heavy-duty floors exposed to high mechanical and chemical load. Can be installed at low temperatures. Short drying periods contribute to faster recommissioning of premises and shorter production downtimes resulting from coating work. Foodstuff production premises, launderettes, professional kitchens, loading bays, storage premises are the typical environments for the application of grindable acrylic renders.

PROPERTIES

Fast curing low-viscosity "all round" acrylic binder for Nanten acrylic coating compounds. Normal layer thickness about 4 mm, in areas exposed to high temperature 6 mm thickness is recommended. Resilience class BC5-Mec (by 54/BLY 12).

TECHNICAL DATA

Colours

Colourless, coating colour is generated with Nanten colour sands.

Material consumption

grindable render with 3 – 4 mm layer thickness requires about 1.6 kg/m² of resin and about 6 kg/m of filler sand (mixing ratio approx. 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 weigh-%
according to temperature	+ 20 °C	2 weigh-%
	+ 10 °C	4 weigh-%
	+ 3 °C	5 weigh-%

Package

Supplied in 20 kg plastic 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)

Can be coated after 45 – 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 0,98 kg /l, ISO 2811.
Viscosity (+ 25°C)	80 - 100 mPas, DIN 53018.
Compression strength	Coating method 50-83 MPa.
Adhesive strength	> 2,5 MPa.
Breakage elongation	133 %.
Tensile strength	10,3 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 20 N, 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. Add the required quantity of selected colour sand into the mixture and continue mixing, trying to avoid mixing any air into the mixture.

Coating


The surface to be coated should be primed with Nanten Acrylic Primer (101 or 107) and roughening/adhesion sand should be scattered on the surface. Mix Nanten Acrylic 20 N (binder + colour sands) 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. Surface structure depends on the grain size of selected colour sand. Nanten Acrylic grindable renders are varnished with a surface sealer suitable for the application environment: Nanten Acrylic Sealer 304 or Sealer 319.

Care of the coated floor:

See www.nanten.fi / products / cleaning and care instructions.

APPLICATION SAFETY:

See www.nanten.fi / products / material safety data sheets. Acrylic 20 N Product Data

		
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13		
1119 -CPD- 1190		
EN 1504-2:2004		
Coating / screed		
Adhesive strength	mass loss < 3000mg	288 mg
Capillary absorption and permeability to water	w < 0,1kg/m ² xh ^{0,5}	0,001 kg
Impact resistance	Class I > 4 Nm	
Adhesion strength by pull-off test > 1,5 N/mm ²		3,3 N/mm ²
Reaction to fire B _{fl} - s1	bfl-s1	B _{fl} s1
Resistance to Severe Chemical attack (28 d without pressure) Class II		Class II
Permeability to CO ₂	sd > 50 m	>2500 m
Permeability to water vapour	Class III	>200m
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.