



NANTEN SL Bio Low VOC

Coating thickness 0,5 – 2,0 mm, depending on intended use.

PRODUCT TYPE

2-component self-levelling epoxy coating for concrete floors. Also suitable for use as a primer.

USAGE

Public premises under medium to hard wear conditions, e.g. hospitals, laboratories, schools, kindergartens, offices, supermarkets, warehouses, logistics centers. Premises where good indoor air quality and long service life of floors are valued.

PROPERTIES

Good mechanical resistance and yellowing resistance. Very low indoor air emission of solvents (VOC): emission class M1 for building material.

TECHNICAL DATA

COLORS

Can be tinted in colors of Nanten and RAL color charts.

GLOSS GROUP

Glossy

COVERAGE

2 mm coating thickness:
Binder (parts A+B) 1,4 l /m²
(2 kg/m²), filler sand 1,4 kg/m².

MIXING RATIO

Part A: 3 parts, by volume. Part B: 1 part by volume.
(Filler sand, appr. 0,2 mm: appr. 20 kg /20 l)

PACKAGING

Part A 15 l in metal tin. Part B 5 l in plastic can.

WORKING TIME (+20 °C)

Appr. 20 -30 min when poured on the floor. With higher temperatures working time is shorter.

DRYING TIME

Dry to touch in 4 h (+ 25 °C) and 8 h (+15 °C). Dry, durable to light traffic in approx. 12 h (+ 25 °C) and > 24 h (+ 15 °C). Fully cured in approx. 7 days.

APPLICATION METHOD

Spread with adjustable trowel or notched steel trowel.

THINNING

Thinners are not allowed (solventless Low VOC product).

CLEANING OF TOOLS

Use e.g., ethyl acetate or Nanten A Epoxy Thinner.

STORAGE

At + 5°C ...+ 25°C, max. shelf-life 6 months. Store warm, in tightly sealed original containers.

OTHER INFORMATION

Solid content: appr. 100 vol.-%.

Final hardness: Shore D 85.

VOC (calculated): < 10 g /l. Maximum allowable content 500 g/l (cat A/j, 2004/42/EC).

DIRECTIONS FOR USE

REQUIREMENTS TO THE SUBSTRATE AND COATING 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 the dew point. During the application and drying of the coating, the temperature of the ambient air, the surface and the coating should be above +15 °C and the relative humidity of the air below 80%. Make sure that the coating is suitable for the base to be coated.

PRETREATMENT

New concrete floor

Remove laitance and any non-cured cement by surface grinding or shot-blasting. 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 any concrete that is in poor condition by surface grinding or shot-blasting. All loose material that lowers adhesion should be cleared away and the surface should be carefully cleaned 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 on the substrate.

PRIMING

Prime with unthinned Nanten HM Bio Low VOC. The primer should seal all the pores in the concrete and form a uniform tight and intact film on the surface.

FILLING

Small hollows and cracks should be cleaned and filled, e.g. with epoxy putty, consisting of HM Bio Low VOC and fine filler sand. Larger and more extensive filling/levelling can be performed with a filling/levelling mixture made of Nanten SL Bio Low VOC and filler sand (grain size e.g. 0,1-0,6mm).

MIXING OF COMPONENTS

First, stir part A and part B of SL Bio Low VOC in their own containers. Estimate the required amount of ready mixture, considering the surface area to be coated and the application time needed. Blend the components into one another in the correct ratio and continue with a

mixer at low speed for about two minutes, avoiding mixing any air into the system. Add the required amount of dry filler sand to the system while mixing simultaneously. Continue for about a minute. Make sure that also the material on the edges and at the bottom of the container becomes properly mixed.

COATING

If the primer was applied more than two days ago, the surface should be roughened by sanding and sanding residues should be removed. Pour the mixed compound to the floor in a pool or in a uniform strip and spread with an adjustable trowel until achieving the required layer thickness. After application, as the work progresses, roll the surface with a spike roller to remove air pockets.

Note! Insufficient mixing of the epoxy coating can cause uneven cure, and an incorrect mixing ratio can result in the coating not curing at all. Do not scrape the mixture left on the edges of the container to the floor.

APPLICATION SAFETY AND CARE OF COATED FLOOR

See instructions: <https://nanten.fi/contractors/data-bank/?lang=en>. For an M1-classified product, cleaning with water or solvent-free detergent is advised.

CE	
Nanten Oy Teollisuustie 6, 04300 Tuusula, Finland	
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0809-CPR-1037 EN 1504-2: 2004 Surface protection products – Coating	
Abrasion resistance (Taber)	< 3000 mg
Capillary absorption and permeability to water	$w < 0,1 \text{ kg/m}^2 \times \text{h}^{0,5}$
Impact resistance	Class II: $\geq 10 \text{ Nm}$
Adhesion strength by pull-off test	$\geq 1,5 \text{ N/mm}^2$
Reaction to fire	$B_{fl} - s_1$
Characteristics have been tested for a system. Details: DoP Nanten SL Bio Low VOC .	

Although the technical specifications of the product description are based on our best knowledge and experience, all the above information must be taken as a guide in all cases. The user must ensure the suitability of the product for the application area. If the instructions are not followed, the user is solely responsible for the possible damages and consequences.