Hämeenkatu 9
05800 HYVINKÄÄ
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www.fescon.fi

NANTEN SL BIO AR

Product description

2-component, solvent-free, self-leveling epoxy coating with excellent chemical resistance.

- Resistant to continuous exposure to oils, greases, fuels, commonly used detergents, and salts, and to temporary exposure to most acids and alkalis used in industrial environments

Applications

- Areas subject to heavy chemical and mechanical stress
- Process and food industry
- Production and storage facilities
- Laboratories
- Hospitals

Instructions

Base requirements and coating conditions

The concrete strength class must be at least C25/30 with a wear resistance class of 3. The relative humidity of the concrete must be below 95%, and the surface temperature must be at least +3°C above the dew point. During application and curing, the temperature of the air, surface, and coating must remain above +15°C, and the relative humidity of the air must be below 80%. Always ensure the suitability of the coating for the intended substrate.

New concrete floor

Cement laitance and any uncured cement must be removed by surface grinding, shot blasting, or milling. All loose and adhesion-reducing material must be removed, and cement dust must be thoroughly vacuumed from the surface.

Old concrete floor

Cement laitance and deteriorated concrete must be removed by grinding, shot blasting, or milling. All loose and adhesion-reducing material must be removed, and the surface must be thoroughly vacuumed. Dirty floors should be washed and rinsed with a synthetic detergent before any further surface preparation. Any existing old paint film on the substrate must be completely removed.

Priming

Priming is carried out using Nanten HM Bio Epoxy. On damp concrete substrates with a relative humidity above 95%, Nanten M Primer suitable for moist concrete must be used. The primer must seal all pores in the concrete to form a continuous, unbroken film.

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Patching

Small holes and cracks must be cleaned and filled with an epoxy filler prepared from Nanten HM Bio Epoxy and fine filler sand. Larger and more extensive leveling or overfilling can be done using a filling/leveling compound made from Nanten SL Bio Epoxy coating and filler sand (grain size e.g. 0.1–0.6 mm).

Mixing

Pre-mix components A and B of the SL Bio AR Epoxy coating in their own containers. Estimate the required amount of mixture based on the size of the area and the working time of the mixture. Combine the components in the correct ratio and mix with a low-speed mixer for approximately two minutes, avoiding air entrainment. Add the required amount of dry filler sand while mixing. Continue mixing for about one minute, ensuring that the container corners are properly mixed.

Mixing ratio

Part A: 3 parts by volume
Part B: 1 part by volume

Coverage

At 2–4 mm film thickness: 1.4–2.4 l/m^2
Consumption at 2 mm film thickness: approx. 1.3 l of epoxy and approx. 1 kg of filler sand per m^2

Application instructions

If the primer has cured for more than two days, surface sanding and removal of sanding residues is required. The mixed compound is poured onto the floor in a puddle or continuous bead and spread with a notched trowel to the desired thickness. As work progresses, the surface is back-rolled with a spiked roller to remove air bubbles.
Note: Inadequate mixing of the epoxy coating may result in uneven curing, and an incorrect mixing ratio may prevent the material from curing at all. Do not scrape and apply material from the sides of the mixing container onto the floor.

Waste handling

Storage and handling of waste
See the separate storage and disposal instructions https://www.fescon.fi/en/material-bank

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Technical information

Colour	Can be tinted according to Nanten and RAL colour charts
Package size	Part A: 15 l in a metal container, Part B: 5 l in a plastic container
Storage	+5°C to +25°C, shelf life up to 6 months. Must be stored in a warm location in tightly sealed original containers.
Mixing time	Approximately two minutes
Density	Binder density: 1.06 kg/l
Solid volume	Approx. 100 vol.%
Usage temperature	+15°C…+25°C
Usage time	Poured onto the floor: approx. 20–30 minutes. Working time decreases as temperature rises.
Drying time	Touch-dry in 6 h (+25°C) and 11 h (+15°C). Resists light traffic after approx. 12 h (+25°C) and approx. 24 h (+15°C). Fully cured in 7 days (+20°C).
Adhesion strength	1.5 N/mm^2
Reaction to fire	Bfl-S1
Relative air humidity	Below 80% during application and curing of the coating
Chemical resistance	Class II
Thinner	Do not dilute
Method of application	Apply with a notched steel trowel or smoothing trowel
VOC content	200 g/l (ready-to-use mixture)EU VOC 2004/42/EC (Cat A/j) max. 500 g/l (2010)
GWP A1 raw material	3.57
GWP A2 transport	0.176
GWP A3 manufacturing	0.595
GWP A1-A3	4.34
GWP A4 transport	0.0315
GWP A5 assembly	0.127
GWP unit	kg CO2e/kg

Remember to consult the Maintenance Instructions for Coated Floors and the product Safety Data Sheet on our website at www.fescon.fi, or request a copy by calling +358 9 274 7970. Although the technical details provided in this product description are based on our best knowledge and experience, the information above should always be

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regarded as indicative. The user is responsible for verifying the suitability of the product for the intended application. If the instructions are not followed, the user assumes full responsibility for any resulting damage or consequences. Limitation of liability, product use notes and restrictions: Please familiarize yourself with Fescon Oy's general terms of delivery and the design and work instructions related to the product.