

Emcephob NanoPerm P

Pigmented surface protection system with permanent anti-graffiti protection

Product Properties

- Water-based, two-component polyurethane acrylate; application by roller or spraying
- Open to water vapour diffusion, carbonation reducing and resistant
- Hydrophobic, soil resistant
- Resistant to light, UV and weathering
- Resistant to frost and de-icing salts
- Tested according to regulations issued by the Community Anti-Graffiti e.V.
- Tested and approved according to ZTV-ING part 3, paragraph 4 as OS-B and OS-C system
- Tested and approved according to DIN 4102-1, class B1
- Certified according to EN 1504 part 2

Areas of Application

- Preventive surface protection of concrete structures, for non-accessible and non-driven-on areas
- Surface protection system in line with concrete repair measures
- Anti-graffiti protection for structural and civil engineering, facades and fair-faced concrete surfaces
- Suitable on concrete, fibre-cement-slabs, Nafufill KM 103, masonry of sand-lime brick, plaster (mineral-based or polymer-modified), coated metal surfaces, various old coatings (advice required!)
- REACh-assessed exposure scenarios: periodical water-contact, periodical inhalation, application
- Principle 1, 2, 5 and 8; procedure 1.2, 2.2, 5.1 and 8.1 (EN 1504.9)

Application

Substrate Preparation

See leaflets "General Application Advice for Surface Protection Systems" and "Graffiti Protection Systems".

If Emcephob NanoPerm P is used in combination with Nafufill KM 103, the substrate must be prepared according to the technical leaflet "General Application Advice for Fine Fillers".

Application

Emcephob NanoPerm P consists of base and hardener component supplied in pre-packed quantities. Before application both components are mixed thoroughly, using a slowly rotating mixer. After mixing Emcephob NanoPerm P is filled into a clean can and mixed again thoroughly.

After mixing is completed Emcephob NanoPerm P is applied cross-wise and evenly onto the substrate by means of a short-pile roller. Application should be carried out quickly and evenly. Emcephob NanoPerm P can also be applied by spraying. In case of spray application please ask for our advice.

Emcephob NanoPerm P must not be applied during rain, at high humidity, frost or risk of frost. Freshly applied coatings must be protected from dew, rain and frost. The surface protection system must be protected from graffiti and dirt for 7 days.

Overcoating

Emcephob NanoPerm P must always be applied in two layers. The indications in the "Technical Data" table must be observed. If the indicated overcoating time is exceeded the basic coating must be grinded. If Emcephob NanoPerm P is used in combination with Emcephob WM (hydrophobic agent) or Nafufill KM 103, Emcephob NanoPerm P has to be applied in a daily rhythm.

Graffiti Removal

Graffiti is removed within the first 72 hours with the Emcephob Cleaner, which is part of the system. Please see the technical data sheet "Emcephob Cleaner" and the relevant DIN material safety data sheets.

General Information

No anti-graffiti system offers a complete protection against all graffiti paints.



Technical Data for Emcephob NanoPerm P

Characteristic	Unit	Value*	Comments
Density	kg/dm ³	1.41	
Solid content	vol. %	52	
Mixing ratio	p. b. w.	10 : 3.5	base : hardener
Pot life	hours	1	
Drying time	hours days	approx. 4 approx. 7	touch-dry resistant (graffiti)
Coverage**	g/m ²	2 x 180 - 200	base coat and top coat
Diffusion resistance against carbon dioxide	m	3,628	at 234 µm dry layer thickness
against water vapour	m	1.25	at 234 µm dry layer thickness
Rainproof	hours	approx. 6 - 8	
Overcoating time	hours	min. 8 max. 72 min. 4 max. 12	Emcephob NanoPerm P on Emcephob NanoPerm P (at + 20 °C) Emcephob NanoPerm P on Emcephob NanoPerm P (at + 30 °C)
Application conditions	°C °C % K	≥ 8 - ≤ 30 ≥ 15 - ≤ 25 ≤ 80 3	air, material and substrate temperature Emcephob NanoPerm P relative humidity above dew point

Product Characteristics Emcephob NanoPerm P

Colour	RAL 1024, 5014, 6011, 7023, 7030, 7032, 7035, 7038, 7042, 7044, 8014, 9002, in white and Onyx-range 1-7 according to MC-colour chart
Delivery	10 kg and 30 kg, 4 kg units on request
Storage	Can be stored in original sealed packages in dry conditions for at least 9 months. Protect from frost! The same requirements are valid for transport.
Disposal	Packs must be emptied completely.
EU-regulation 2004/42 (Decopaint standard)	RL2004/42/EG All/j (140/140 g/l) max 75 g/l VOC

* All technical data relate to + 23 °C and 50 % relative humidity, material temperature between + 15 °C and + 25 °C.

** Coverage rates depend on roughness, porosity and type of the substrate. To determine specific coverage rates we recommend to apply a sample area.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 07/09. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.