

Emcephob NanoPerm T

Transparent, preventive concrete protection with permanent anti-graffiti protection

Product Properties

- Water-based, 2-component polyurethane acrylate, resistant to light, UV, weathering, non-chalking
- Hydrophobic, soil resistant
- Resistant to frost and de-icing salts
- Carbonation-inhibiting, open to water vapour diffusion
- Application by roller or spraying
- Tested according to regulations issued by the Community Anti-Graffiti e.V.
- Approved by the Federal Highway Research Institute
- Tested and approved according to DIN 4102-1, class B1
- Certified according to EN 1504 part 2

Areas of Application

- Preventive concrete and graffiti protection for exterior surfaces
- Suitable on concrete, plaster, coated metal surfaces and various old coatings
- Can be combined with Emcephob NanoWax (semi-permanent system)
- On exposed concrete only in combination with the primer Emcephob NanoPerm T Primer
- 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 leaflet "General Application Advice for Graffiti Protection Systems and Surface Protection Systems".

The substrate must be clean and dry before application. The surface tensile strength must not be below 0.6 N/mm².

Mixing/Application

Emcephob NanoPerm T consists of base and hardener component delivered in pre-packed quantities. Before application both components are mixed thoroughly using a slowly rotating mixer. After mixing Emcephob NanoPerm T is filled into a clean can and mixed again thoroughly. After mixing is completed Emcephob NanoPerm T is applied cross-wise and evenly onto the substrate by means of a short pile roller. Application should be carried out quickly and streak-free.

Alternatively, application can be carried out by spraying. Please ask for our equipment planner. Emcephob NanoPerm T 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

As permanent system Emcephob NanoPerm T must 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 T is used in combination with Emcephob NanoWax (semi-permanent system), Emcephob NanoWax has to be applied onto Emcephob NanoPerm T in a daily rhythm.

Graffiti Removal

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

General Information

No anti-graffiti system offers a complete protection against all graffiti paints. Emcephob NanoPerm T is transparent but visible. Certain factors, e.g. perspective, influence the visual character, i.e. dull or cloudy appearance. Shadows or stains on the substrate are intensified.



Technical Data for Emcephob NanoPerm T

Characteristic	Unit	Value*	Comments
Density	kg/dm ³	1.08	
Solid content	vol. %	47	
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 150 - 200	base coat and top coat
Diffusion resistance against carbon dioxide	m	824	
against water vapour	m	0.62	
Rain proof	hours	approx. 4 - 6	
Overcoating time***	hours	min. 4 min. 8 max. 72 min. 4 max. 12	Emcephob NanoPerm T Primer Emcephob NanoPerm T on Emcephob NanoPerm T (at + 20 °C) Emcephob NanoPerm T on Emcephob NanoPerm T (at + 30 °C)
Application conditions	°C °C % K	≥ 8 - ≤ 30 ≥ 15 - ≤ 25 ≤ 80 3	air and substrate temperature material temperature relative humidity above dew point

Product Characteristics Emcephob NanoPerm T

Colour	transparent
Delivery	4 kg, 10 kg and 30 kg
Storage	Can be stored in original sealed packages in dry conditions for 12 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 59 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.

***If the overcoating time is exceeded the basic coat must be grinded.

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 09/11. 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.