



TIKKURILA

NOVOPOX LP

EPOXY COATING

DESCRIPTION

A two component self-leveling solvent-free epoxy coating. The product can be used as paint, coating or screed depending on the amount of sand added.

RECOMMENDED USES

For old and new concrete floors and especially balcony concrete floors.

PRODUCT FEATURES

For concrete floors where properties, such as durability and impermeability of moisture and gaseous compounds, are required. Only for professional use.



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TECHNICAL DATA

Colour Shades	Floor paint colour map tints 2115 and 2116
Gloss	Full-glossy (1/RT classification)
Coverage	Coverage depends on the porosity and evenness of the substrate and on the application method. Coverage on concrete floors is on average: Film thickness 0.3 mm - coverage approx. 3 m ² /litre Film thickness 0.5 mm - coverage approx. 2 m ² /litre Film thickness 2.0 mm - screed 2 liters mixed screed/m ² .
Can sizes	2 l, 7 l
Thinner	Novopox LP epoxy coating is not thinned.
Mixing ratio	Part A 10 volumes (3,7 parts by weight) Part B 4 volume (1 part by weight) Pulp film thickness 1.5 - 3.0mm 1 volume of Novopox LP mixture 1 volume of sand with grain size Ø 0.1 - 0.6
Application method	Application by serrated or steel trowel, leveling with mohair or felt roller.
Pot-life (+23°C)	20 - 30 minutes poured onto the floor; approx. 15 minutes in the mixing container.
Drying time (23°C and 50% relative air humidity)	Dust dry 6 hours Light trucking 24 hours Dry through 7 days Drying is decelerated at lower temperatures.
Density (kg/l)	1.4 kg / l ready mixture, ISO 2811
Chemical resistance	Withstands water, oils, greases, chemicals and weak dilutions of non-oxidizing acids, alkali and salt solutions. Only resists temporary splashes of oxidizing acids and bleaching chemicals. More detailed information on chemical resistance available in a separate table.
Abrasion resistance	Good
Heat resistance	Withstands up to +70 °C dry heat and +60 °C immersed.
Volume solids (%)	100
VOC	(cat A/j) 500g/l (2010) Novopox LP epoxy coating contains VOC max 500g/l.

The above information is not intended to be exhaustive or complete. The information is based on laboratory tests and practical experience, and it is given to the best of our knowledge. The quality of the product is ensured by our operational system, based on the requirements of ISO 9001 and ISO 14001. As manufacturer we cannot control the conditions under which the product is being used or the many factors that have an effect on the use and application of the product. We disclaim liability for any damages caused by using the product against our instructions or for inappropriate purposes. We reserve the right to change the given information unilaterally without notice.

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Storage

Unaffected by cold storage or transportation.

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APPLICATION INSTRUCTIONS

Application conditions

The concrete surface must be dry and at least 4 weeks old. The relative humidity of the concrete should not exceed 97 %. The temperature of the ambient air, surface and coating should not fall below + 10 °C during either application or drying. The relative humidity of the air should not exceed 80 %.

Mixing components

A 10 parts by volume (3.7 weight fractions) B 4 parts by volume (1 weight fraction) Screed film thickness 1.5-3.0 mm 1 part by volume NOVOPOX LP mixture 1 part by volume sand, grain size Ø 0.1-0.6 mm. Combine pre-mixed components A and B and mix thoroughly using a paint mixer attached to a power drill (recommended mixing time approx. 2 minutes). The area to be coated and the pot-life of the mixture are to be taken into consideration when estimating the amount of mixture needed. Insufficient mixing or incorrect mixing ratio will result in uneven drying of the surface, weaken the properties of the coating and put successful application at risk.

Surface preparation

New cement floors:

Remove the laitance layer by surface grinding, centrifugal blasting or hydrochloric acid pickling. Choose the method best suited for the premises in question. After sanding carefully remove the concrete dust with a vacuum cleaner. Hydrochloric acid pickling is carried out with diluted hydrochloric acid (1 part concentrated hydrochloric acid, 4 parts water). Rinse the floor with plenty of water. Dry the floor.

Old cement floor:

Remove all dust and loose material from the floor. Remove all grease, oil, chemicals and other impurities by emulsion cleaning, grinding, milling, flame cleaning or centrifugal blasting. Choose the method best suited for the premises in question. Remove old peeling paint films.

Clean out holes and cracks on the floor until you reach healthy, clean concrete. Open cracks with, for example, an edge grinder. Remove loose material and dust.

Patching

Repair cavities and cracks with a mixture of unthinned NOVOPOX P epoxy primer or Novopox LP epoxy coating and dry, clean sand. Mixing ratio e.g. 1 part by volume of epoxy mixture and 1 - 2 parts by volume of sand, grain size Ø 0.1 - 0.6 mm. Sand the patched areas to the same level with the surrounding surface prior to coating.

Priming

Prime using NOVOPOX P epoxy primer thinned 30 - 50% with Epoxy thinner 1074. Pour enough varnish mixture onto the floor to impregnate the surface. If necessary, repeat priming to achieve a non-porous surface. Subsequent treatment can be carried out after 2 hours using the "wet-on-wet" technique. Use spike soled shoes when walking on the wet primer.

Painting

Prime old treated concrete floors with Novopox LP epoxy coating thinned approx. 10-15 % with Epoxy thinner 1074. Finish with Novopox LP epoxy coating thinned approx. 10% with Epoxy thinner 1074.

RUBBING:

Improve grip on painted surfaces by adding Liukueste non-slip agent to Novopox LP epoxy coating. Begin by applying the first coat

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normally according to instructions. When the Novopox LP epoxy coating is dry enough to withstand walking (within 24 hours), apply a non-slip coating as follows. Dilute Novopox LP epoxy coating with 30-40 vol% Epoxy thinner 1074. Mix thoroughly with a electric drill equipped with a paint blender. Add 1 can (0.3 l) of Liukeste non-slip agent per 10 liters Novopox LP epoxy coating into the mixture. Mix thoroughly with a power drill equipped with a paint blender. With a short-pile roller, apply the non-slip coating to the entire floor area or parts of it marked off with tape. If the non-slip treatment appears insufficient, improve it by repeating the treatment with a new coat after 2 hours drying time. The pot-life of diluted Novopox LP epoxy coating is considerably longer than that shown in the instructions, but the drying time is the same for both diluted and undiluted Novopox LP epoxy coating. Note that during application, thick coats of paint will not dry properly, but will instead remain in a jelly-like form.

Coating

Coating may be carried out no less than 6 hrs (+23°C) and no more than 24 hrs after priming and patching. Over 24 hour old primed surface should be sanded prior to coating. Pour the mixture out onto the floor and apply with a serrated steel trowel or trowel. Use spike soled shoes when walking on the wet primer.

Cleaning of tools

Epoxy thinner 1074

Maintenance instructions

The painted surface reaches ultimate durability and hardness in approximately 2 weeks after surface treatment under normal conditions. Avoid cleaning during this time. Clean the surface with a brush, mop or dust cloth. Clean soiled surfaces with a cleaning tool and neutral (pH 6-8) detergent.

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EN 1504-2:2004

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TIK-0165-5001	
EN 1504-2:2004	
Product for protection and repair of concrete structures – Coating.	
Permeability to CO ₂	$s_D > 50 \text{ m}$
Impact resistance	Class I: $\geq 4 \text{ Nm}$
Capillary absorption and permeability to water	$w < 0,1 \text{ kg/m}^2 \cdot h_{0,5}$
Abrasion resistance	weight loss $< 3000 \text{ mg}$
Reaction to fire	B _{f1} -s1
Adhesion strength by pull off test	$\geq 2,0 \text{ N/mm}^2$
Release of dangerous substances	NPD
Permeability to water vapour	class II, $5 \text{ m} < s_D < 50 \text{ m}$
Resistance to severe chemical attack	class II

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