TEKNOFLOOR PRIMER 310F

Epoxy varnish

TEKNOFLOOR PRIMER 310F is a solvent-free, two-pack epoxy varnish.

TEKNOFLOOR PRIMER 310F is used as a primer under epoxy coatings and flooring screeds. By adding sand it can be used for repairing concrete floors and rounding off corners. Sunlight will yellow the varnish and therefore it is not recommended to use as a topcoat.

TEKNOFLOOR PRIMER 310F hardens fast. The diluted varnish will penetrate into concrete's pores sealing it thus ensuring of the adhesion of the coating and screed onto substrate. It is also suitable for use for making so called levelling screed. An alternate hardener, TEKNOFLOOR PRIMER HARDENER 310H-01, is obtainable for the product in order to improve availability.

TECHNICAL DATA

Certificates, approvals and classification	CE marking
Fields of application	Floors
Recommended substrate	Concrete
Binder	Epoxy
Solids	Approx. 100% by volume
Total mass of solids	Approx. 1100 g/l
Volatile organic compound (VOC)	Approx. 0 g/l (DIRECTIVE 2010/75/EU) The VOC value provided is the average value for factory produced products, and consequently it will be subject to variations between individual products covered by this Technical Data Sheet.
Practical spreading rate	Depending on surface roughness and porosity. The standard rate for a steel-trowelled, blast-cleaned concrete floors is 3 - 6 m²/l.
Gloss (60°)	Full gloss
Hardener	Comp. B: TEKNOFLOOR PRIMER HARDENER 310H or TEKNOFLOOR PRIMER HARDENER 310H-01
Mixing ratio (A:B)	2:1 parts by volume
Pot life	Undiluted mixture: 20 min (poured out onto the floor) 10 min (kept in the vessel) Diluted mixture: 30 min (poured out onto the floor) 15 - 20 min (kept in the vessel)
Thinner	TEKNOSOLV 9506, TEKNOSOLV 9515.

Storage	The storage stability is shown on the label. Must be stored tightly closed and kept cool.

DIRECTION FOR USE

Surface preparation	NEW CONCRETE SURFACES: The concrete must be at least 4 weeks old and well-hardened so that all moisture from casting is bound and the surface dry. The moisture of the concrete must not exceed 97% as relative humidity or 4% by weight (by 54 / BLY 12). Dense laitance is to be removed from steel-trowelled concrete by shot-blasting or surface grinding. Brittle and powdery top layers are treated so that the solid concrete containing aggregate is exposed. Thereafter all cement dust is removed by vacuum cleaner or brush. The concrete surface must be clean of anything that might hinder the adhesion. OLD CONCRETE SURFACES: Uncoated, greasy floors are cleaned by emulsion wash. Thereafter laitance is removed by shot-blasting, scarifying, surface grinding or etching. Scarifying and shot-blasting are the best methods for removal of disrepair concrete or old flaking paint or composition layers. The surface preparation method for both new and old concrete is chosen according to condition of the concrete and strain the floor will be exposed to. The best method for floors to be attacked by heavy abrasion, chemicals or hot water is scarifying or shot-blasting. Surface grinding is enough if the floor will be subjected to minor abrasion only. In general, surface preparation by etching is not recommended for composition floors within industry. Etching is mainly used for small areas when mechanical preparation methods are not applicable. Etching is to be done with RENSA ETCHING etching liquid. Rinse the floor with water after etching and allow to dry. All special jobs should be done before the application of the actual priming. E.g. cutting grooves at joints between steel and concrete. Cutting working and expansion joints open. Fitting up skirting and rounding of corners. Filling cavities and cervices, and possible levelling down the floor. Filling can be done with TEKNOPOX FILL or with stiff putty prepared by adding an adequate amount of dry sand (e.g. 0.1 - 0.6 mm) to undiluted varnish.

Priming	The priming is done "wet-on-wet" with varnish that is diluted by 20 - 30% with TEKNOSOLV 9506 or TEKNOSOLV 9515. TEKNOSOLV 9515 has a milder odour and therefore can be used in spaces where strong smells are to be avoided. The amount of thinner depends on the density of the concrete. Immediately after mixing pour the mixture as a streak onto the floor and apply e.g. with a short-piled mohair roller. Use lashings of varnish so that the entire surface is coated with a thick film therefore sealing the surface. Recoat immediately all areas that have absorbed the varnish completely. The number of priming coats depend on the quality of the concrete's surface. The priming may have to be done several times. If the surface is left porous, when coating is applied air bubbles may rise up and leave holes on the surface.
Application method	Mohair roller
Application	The coating can be applied when the priming coat has dried for at least 4 h (+23°C). Avoid intervals longer than 24 hours. If the priming coat has been applied more than 24 h ago the surface must be rubbed down and cleaned before it is overcoated. TEKNOFLOOR PRIMER 310F is suitable for making so called levelling screed. The levelling screed is made as follows: into 9 l of mixture is added 8 - 10 l of 0.1 - 0.6 mm dry natural sand and stirred with a drilling machine. The levelling screed can be used for smoothing down uneven marks left by e.g. cutter. The levelling screed is applied by steel trowel. THE LEVELLING SCREED IS NOT TO BE DILUTED!
Application conditions	During the application and drying period the temperature of the ambient air, the surface and the product shall be above +10°C and the relative air humidity below 80%. Additionally, the temperature of the surface to be treated and the product must be at least +3°C above the dew point of the ambient air.

Drying time

+23 °C / 50% RH	TEKNOFLOOR PRIMER HARDENER 310H	TEKNOFLOOR PRIMER HARDENER 310H-01
touch dry (ISO 9117-5:2012)	4 h	5 h
fit for light traffic	16 h	16 h

The drying time is as previously mentioned when the temperature of the product as well as air and surface is +23 °C.

Overcoatable

surface temperature	by itself, with TEKNOFLOOR 400F or TEKNOFLOOR 500F	
	min.	max.*
+10 °C	18 h	48 h
+23 °C	4 h	24 h

* Maximum overcoating interval without roughening.
Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.

Cleaning TEKNOSOLV 9506 or TEKNOSOLV 9515.

HEALTH AND SAFETY

Safety and precaution measures See safety data sheet.

CE
0809
Teknos Oy, Takkatie 3, P.O. Box 107, FI-00371 Helsinki, Finland. 13 Declaration of Performance No. 0011
0809-CPR-1063 EN 1504-2:2004
Surface protection products – Coating
Physical resistance (5.1)
Chemical resistance (6.1)

Abrasion resistance	Requirement: Weight loss less than 3000 mg
Capillary absorption and permeability to water	Requirement: w < 0,1 kg/m^2 x √h
Resistance to severe chemical attack	Requirement: Reduction in hardness of less than 50 %
Impact resistance	Class I: > 4 Nm
Adhesion strength by pull-off test	Requirement: Rigid system with trafficking: ≥ 2,0 (1,5) N/mm^2
Reaction to fire	B_{fl} - s1
Dangerous substances	See safety data sheet

Teknos Group Oy Takkatie 3, P.O.Box 107 FI-00371 Helsinki, Finland Tel. +358 9 506 091