

TEKNOPUR SEALER 100-00

Polyurethane varnish

TEKNOPUR SEALER 100-00 is a moisture curing one-pack polyurethane varnish.

Used as a primer on blast-cleaned steel surfaces in elastomeric coating systems. Varnish is flexible and therefore suitable on several different surfaces. Product is solvent-free.

Product has CE approval for protection of concrete structures.



TECHNICAL DATA

Certificates, approvals and classification	CE marking												
Recommended substrate	Bitumen, Concrete, GRP (glass reinforced polyester), Plywood, Wood												
Binder	Polyurethane												
Solids	Approx. 100% by volume												
Total mass of solids	Approx. 1160 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.												
Theoretical spreading rate	<table border="1"><thead><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m²/l)</th></tr></thead><tbody><tr><td>60</td><td>60</td><td>16.7</td></tr><tr><td>80</td><td>80</td><td>12.5</td></tr><tr><td>100</td><td>100</td><td>10.0</td></tr></tbody></table> <p>As many of the paint's properties will change if too thick coats are applied, it is not recommended that the product is applied to a film thickness that is more than double of the thickest recommended film.</p>	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m ² /l)	60	60	16.7	80	80	12.5	100	100	10.0
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Practical spreading rate	The values depend on the application technique, surface conditions, overspray, etc.												
Colours	Clear.												
Gloss (60°)	Gloss												
Thinner	TEKNOSOLV 9521 or TEKNOCLEAN 6496.												

Storage

The storage stability is shown on the label. Store indoors in a cool and dry place and in a tightly closed can.

The product reacts with air humidity and therefore the opened can is to be kept carefully closed, and it is recommended to be used within 7 d of opening.

DIRECTION FOR USE

Surface preparation

Remove from the surfaces any contaminants that might be detrimental to surface preparation and application. Remove also water-soluble salts by using appropriate methods. The surfaces are prepared according to the different materials as follows:

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 45 / BLY 7).

Dense laitance is to be removed from the concrete by shot-blasting, sanding or by sand blasting. 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.

BITUMEN SURFACES: Remove from the surfaces any contaminants (e.g. grease and salts) that might be detrimental to painting. Surfaces to be painted must be dry and clean. Damaged parts are pretreated in accordance with the requirements placed by the substrate and the maintenance painting.

GRP (Glasfiber Reinforced Plastic) COMPOSITE: Pretreat the surface using mechanical abrasive sanding P60 - P80. Remove dust. Due to varying nature of composites adhesion test is always recommended before extensive using.

The place and time of the preparation are to be chosen so that the prepared surface will not get dirty or damp before the subsequent treatment.

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

Application method

Brush, Roller, Spray

Application Apply by roller or brush to recommended film thickness. Applying on porous surfaces it is recommended to apply 2 - 3 layers.

PLYWOOD AND WOODEN SURFACES / GRP (Glasfiber Reinforced Plastic) COMPOSITE:
The varnish is applied by roller, brush or spray. When applying by spray, thin the product 2% with TEKNOSOLV 9521. Varnish absorbs into porous material, therefore a renewed treatment may be necessary.

Application conditions The surface to be treated has to be dry and the relative air humidity should be 50 - 90 %. During the application and drying process the air temperature and the surface to be treated has to be at least -5°C. The temperature of the product must be at least 3°C above the dew point of the ambient air.

Thinning If required the product is diluted with TEKNOSOLV 9521.
If a faster overcoating with TEKNOPUR products is needed, TEKNOPUR SEALER 100-00 can be diluted 1 - 2% with TEKNODUR ADDITIVE 3333-02.

Drying time +23°C / 50% RH (dry film 60 µm)
- dust free 4 h (ISO 9117-3:2010)
- through dry 10 h (ISO 9117-1:2009)

Overcoatable

surface temperature	with TEKNOPUR-series coatings	
	min.	max.
+10°C	16 h	48 h
+23°C	8 h	48 h

The values given for drying times and overcoatability may vary depending on film thickness and drying conditions.

Rise in the relative humidity of the air in the drying space will accelerate the drying process.

Cleaning TEKNOSOLV 9521 or TEKNOCLEAN 6496.

HEALTH AND SAFETY

Safety and precaution measures See safety data sheet.



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Declaration of Performance No. 0037

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EN 1504-2:2004

Surface protection products – Coating

Physical resistance (5.1)

Chemical resistance (6.1)

Moisture control (2.2)

Abrasion resistance	Requirement: Weight loss less than 3000 mg
Capillary absorption and permeability to water	Requirement: $w < 0.1 \text{ kg/m}^2 \times \sqrt{h}$
Resistance to severe chemical attack	Requirement: Reduction in hardness of less than 50 %
Impact resistance	Class III: $\geq 20 \text{ Nm}$
Adhesion strength by pull-off test	Requirement: Crack-bridging system with trafficking: $\geq 1.5 (1.0) \text{ N/mm}^2$
Crack bridging ability	Class A5: Width of the crack bridged $> 2.5 \text{ mm}$, $-10 \text{ }^\circ\text{C}$
Dangerous substances	See safety data sheet

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