

TEKNODUR PRIMER 17

Ultra high-solid premium quality polyurethane primer

TEKNODUR PRIMER 17 is a premium quality, two-component, ultra high-solid primer based on special polyurethane, with excellent filling and levelling properties.



Being a polyurethane primer, primed objects can be stored temporarily outdoors while waiting to be top coated. The primer is pigmented with active anticorrosion pigments.

For coating of all kinds of steel parts with high requirements regarding corrosion protection. Main field of applications are within commercial and rail vehicle manufacturing as well as any other industry desiring premium quality polyurethane primer.

Together with TEKNODUR 35-900 polyurethane top coat, the product offers fast process throughput times made possible by fast primer overcoating pace. For process simplification this system utilizes the same hardener, TEKNODUR HARDENER 0087, for both primer and top coat.

TECHNICAL DATA

Fields of application	Machinery, Transportation equipment		
Recommended substrate	Aluminium, Stainless steel, Steel, Zinc		
Binder	Polyurethane		
Solids	63 ±2% by volume (Comp. A)		
Total mass of solids	Approx. 1250 g/l		
Theoretical spreading rate	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m²/l)
	40	64	15.8
	80	127	7.9
	120	191	5.3
Practical spreading rate	The values depend on the application technique, surface conditions, overspray, etc.		
Colours	Dusty grey.		
Gloss (60°)	Semi-matt		
Hardener	Comp. B: TEKNODUR HARDENER 0087		
Pot life	Approx. 3 h (+20°C)		
Thinner	TEKNOSOLV 6622		

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.

Storage

Storage stability is 1 year in unopened package. Store in a cool place. Most suitable storage temperature is +5°C - +25°C. Must not freeze.

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:

STEEL SURFACES: Remove mill scale and rust by blast cleaning to preparation grade Sa 2½ (standard ISO 8501-1). Roughening the surface of thin-plate improves the adhesion of the paint to the substrate.

ZINC SURFACES: Hot-dip-galvanized steel structures that are exposed to atmospheric corrosion can be painted if the surfaces are sweep blast-cleaned (SaS) till matt all over. Suitable cleaning agents are, e.g. aluminium oxide and natural sand. It is not recommended according to standard ISO 12944-5 to paint hot-dip-galvanized objects that are subjected to immersion strain. Painting of hot-dip-galvanized objects that are subjected to immersion strain must be discussed separately with Teknos.

It is recommended that new zinc-coated thin-plate structures are treated with sweep blast-cleaning (SaS). Thin-plate surfaces that have been weathered to matt can be treated also with RENSA STEEL washing agent for galvanized surfaces.

ALUMINIUM SURFACES: Treat the surfaces with RENSA STEEL washing agent for galvanized surfaces. Surfaces that are exposed to weathering are also roughened up with sweep blast-cleaning (AlSaS) or sanding.

OLD PAINTED SURFACES SUITABLE FOR OVERCOATING: Any impurities that might be detrimental to the application of paint (e.g. grease and salts) are removed. The surfaces must be dry and clean. Old, painted surfaces that have exceeded the maximum overcoating time are to be roughened as well. Damaged parts are prepared in accordance with the requirements of the substrate and the maintenance coating.

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

Airless spraying, Air-assisted airless spraying, Conventional spraying

Application

MIXING OF THE COMPONENTS:

10 : 1 parts by weight

6 : 1 parts by volume

Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. Before application the base and hardener are mixed in right proportion. Stir thoroughly down to the bottom of the vessel. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties.

Stir thoroughly before use.

Brush or roller can be used for touching up.

	Airless spray	Air-assisted airless spray	Conventional spray
Thinner	0 – 10 -% TEKNOSOLV 6622	0 – 10 % TEKNOSOLV 6622	
Application viscosity	35 – 50 s DIN 4	35 – 50 s DIN 4	25 – 35 s DIN 4
Nozzle	0.011" – 0.014"	0.011" – 0.014"	1.5 – 2.0 mm
Paint pressure	150 – 180 bar	120 – 160 bar	-
Air pressure	-	2.5 – 3.0 bar	3.5 – 5 bar

Application conditions

The surface to be treated must be dry. During the application and drying period the temperature of the ambient air, the surface and the product shall be above +5°C and below +35°C and the relative air humidity below 85%. 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

+20°C / 65% RH (dry film 50 µm)

- dust free

Approx. 60 – 90 min.

- touch dry

Approx. 4 – 6 h

Overcoatable

surface temperature	TEKNODUR 35-900	
	min.	max. *
+23°C	30 min	6 months

* Maximum overcoating interval without roughening.

A completely clean surface is mandatory to ensure the best intercoat adhesion. If the maximum overcoating interval has been exceeded, the surface must be roughened before overcoating. Increase in film thickness and rise in the relative humidity of the air in the drying space slow down the drying process and effect the overcoating properties.

Cleaning

TEKNOCLEAN 6496

HEALTH AND SAFETY

Safety and precaution measures

See safety data sheet.

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

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