

TEKNODUR 35-900

High solids premium quality polyurethane top coat

TEKNODUR 35-900 is a two pack, full gloss ready to use polyurethane top coat. The hardener is an aliphatic isocyanate resin.



TEKNODUR 35-900 is a premium quality, full gloss top coat providing very high UV-resistance with excellent colour and gloss stability. The coating gives a high quality finish with excellent mechanical durability, elasticity and chemical resistance to ensure a long-lasting finish.

With its excellent filling properties, high hiding power and easy application, TEKNODUR 35-900 is an optimal solution for surfaces that are subjected to heavy stresses, yet still requires a premium quality appearance in the desired colour. Main field of applications are within commercial and rail vehicle manufacturing as well as any other industry desiring high end full gloss finish.

Together with TEKNODUR PRIMER 17, 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	Metal
Binder	Polyurethane
Solids	52 ±2% by volume
Total mass of solids	Approx. 770 g/l
Volatile organic compound (VOC)	Approx. 430 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	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m ² /l)
	40	77	13.0
	60	115	8.7

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.

Practical spreading rate The values depend on the application technique, surface conditions, overspray, etc.

Colours	RAL Classic Gloss color chart. Factory, OEM and Fleet colours by agreement.
Tinting system	Teknotint
Gloss (60°)	Full gloss > 80 gloss units at 20 ° viewing angle.
Hardener	Comp. B: TEKNODUR HARDENER 0087
Mixing ratio (A:B)	2:1 parts by volume
Pot life, +23 °C	6 h
Thinner	The product is delivered ready for use. Suitable thinners and application viscosities see Application.
Storage	The storage stability is shown on the label. Store indoors in a cool and dry place and in a tightly closed can. The hardener reacts with air humidity and therefore the opened can is to be kept carefully closed, and it is recommended to be used within 14 d of opening.

DIRECTION FOR USE

Surface preparation	<p>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:</p> <p>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.</p> <p>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.</p> <p>Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.</p>
Priming	Recommended primers are: TEKNODUR PRIMER 17 and TEKNOPOX PRIMER 9-00.
Application method	Air-assisted airless spraying, Conventional spraying

Application

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.

Before use clean the spray gun and paint vessels with a thinner suitable for the paint.

Stir thoroughly before use.

	Air-assisted airless spray	Conventional spray
Thinner	0 – 5 % TEKNOSOLV 6622	0 – 10 % TEKNOSOLV 6622
Application viscosity	20 – 30 s DIN 4	18 – 24 s DIN 4
Nozzle	0.010 – 0.013"	1.2 – 1.7 mm
Paint pressure	80 – 100 bar	-
Air pressure	2.5 – 3.5 bar	2.5 – 3.5 bar
Number of coats	1.5 – 2	1.5 – 2
Flash of between coats	5 – 10 min	5 – 10 min

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 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 (dry film 40 µm)

- dust free

2 h (ISO 9117-3:2010)

- touch dry

8 h (ISO 9117-5:2012)

Overcoatable

surface temperature	by itself	
	min.	max.
+10°C	24 h	7 days*
+23°C	7 h	3 days*

Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.

* If the maximum overcoating interval is exceeded, the top coat surface should be sanded matt e.g. with a very fine grit sandpaper, e.g. P600 – P1000 using an orbital sander or using an ultra fine sanding pad.

Cleaning

TEKNOCLEAN 6496

HEALTH AND SAFETY

Safety and precaution measures

See safety data sheet.

The hardener of the product and the ready mixture contain isocyanates. In poorly ventilated areas and especially when using spray application we recommend the use of a fresh air mask. In short or temporary work, a mask with combined filter A2-P2 can be used. In this case eyes and face are to be protected.

The hardener can must be opened with caution, as pressure may develop in the can during storage.

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