

TEKNODUR COMBI 340-811

Polyurethane paint

TEKNODUR COMBI 340-811 is a two pack anticorrosive pigmented polyurethane paint with low solvent content where the hardener used is an aliphatic isocyanate resin.

TEKNODUR COMBI 340-811 is used as so-called one layer paint. The paint can also be used as a top coat in Polyurethane Coating Systems. It is suitable to use on steel surfaces.

The paint produces a film with good mechanical and weather resistance properties. The use of TEKNODUR 0290 Polyurethane varnish is recommended on objects when the topcoat is required to have excellent gloss and colour retention.



TECHNICAL DATA

Recommended substrate	Steel														
Binder	Polyurethane														
Solids	70 ±2% by volume (ISO 3233:1988)														
Total mass of solids	Approx. 1050 g/l														
Volatile organic compound (VOC)	Approx. 275 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><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m²/l)</th></tr><tr><td>80</td><td>114</td><td>8.8</td></tr><tr><td>100</td><td>142</td><td>7.0</td></tr><tr><td>120</td><td>171</td><td>5.8</td></tr></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 (m²/l)	80	114	8.8	100	142	7.0	120	171	5.8
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Practical spreading rate	The values depend on the application technique, surface conditions, overspray, etc.														
Colours	By agreement.														
Tinting system	Teknotint														
Gloss (60°)	Gloss														
Hardener	Comp. B: TEKNODUR HARDENER 7295														
Mixing ratio (A:B)	4:1 parts by volume														
Pot life, +23 °C	60 min														

Thinner

TEKNOSOLV 1602, TEKNOSOLV 6622, TEKNOSOLV 9521, TEKNOSOLV 9524, TEKNOSOLV 9504

Storage

The storage stability is shown on the label. The hardener reacts with air humidity. Store in a cool place and in tightly closed containers. Use opened hardener within two weeks.

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.

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, Conventional spraying
Suitable airless nozzle size 0.011 - 0.015".

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.

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

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.

Thinning

Dilute the paint 2 - 10% by volume, when required.
Slow thinners: TEKNOSOLV 9521 and TEKNOSOLV 9524. Used e.g. when painting large surfaces, when the temperature is above room temperature and when the paint is dried at elevated temperatures.
Standard thinners: TEKNOSOLV 1602 and TEKNOSOLV 6622.
Fast thinner: TEKNOSOLV 9504.
Do not use universal diluent or thinner, since they react with the hardener.
With maintenance or touch up painting by conventional spraying TEKNOSOLV 9524 can be used as a thinner (max. 35 vol-%). Then also fast drying (eg. IR-drying) is possible.

Drying time

+23 °C / 50% RH (dry film 80 µm)

- dust free

70 min (ISO 9117-3:2010)

- touch dry

8 h (ISO 9117-5:2012)

- forced drying

1 h, +60 °C

Overcoatable

surface temperature	by itself	
	min.	max.
+5 °C	24 h	-
+23 °C	7 h	-

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

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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