

# TEKNODUR 0190

## Polyurethane top coat

TEKNODUR 0190 is a two pack polyurethane top coat. The hardener is an aliphatic isocyanate resin.

Used as a top coat in polyurethane coating systems on steel and metal.

The paint produces a high gloss film with good mechanical and weather resistance. Varnishing with TEKNODUR 0290 Polyurethane Varnish is recommended when the topcoat is required to have excellent gloss and colour retention.



## TECHNICAL DATA

<b>Recommended substrate</b>	Steel						
<b>Binder</b>	Polyurethane						
<b>Solids</b>	50 ±2% by volume						
<b>Total mass of solids</b>	Approx. 860 g/l						
<b>Volatile organic compound (VOC)</b>	Approx. 470 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.						
<b>Theoretical spreading rate</b>	<table border="1"><thead><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m<sup>2</sup>/l)</th></tr></thead><tbody><tr><td>40</td><td>80</td><td>12.5</td></tr></tbody></table>	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m <sup>2</sup> /l)	40	80	12.5
Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m <sup>2</sup> /l)					
40	80	12.5					
<b>Practical spreading rate</b>	The values depend on the application technique, surface conditions, overspray, etc.						
<b>Colours</b>	Factory colours by agreement. Same tinting system should be used during the whole painting project.						
<b>Tinting system</b>	Teknomix; Teknotint						
<b>Gloss (60°)</b>	Gloss						
<b>Hardener</b>	Comp. B: TEKNODUR HARDENER 0100/0200						
<b>Mixing ratio (A:B)</b>	4:1 parts by volume						
<b>Pot life, +23°C</b>	6 h						
<b>Thinner</b>	Standard thinners: TEKNOSOLV 9526 and TEKNOSOLV 6220. Other thinners suitable for the product: see Thinning.						

**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**

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:

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.

**Priming**

Recommended primers are: TEKNOPLAST PRIMER -series. Also suitable primers are e.g. INERTA PRIMER 5, INERTA 51 MIOX and TEKNOPOX PRIMER 8-00.

**Application method**

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.

Suitable airless nozzle size 0.011 - 0.013".

**Application conditions**

The surface to be treated has to 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 10 - 30%, when required. Do not use universal thinners, since they may contain alcohol which will react with the hardener.

Standard thinners: TEKNOSOLV 9526 and TEKNOSOLV 6220.

Slow thinner: TEKNOSOLV 6291. Used e.g. when painting large surfaces and when the temperature is above room temperature.

Fast thinner: TEKNOSOLV 9529. Used when spray painting large surfaces with mist coating technique.

**Drying time**

+23 °C / 50% RH (dry film 40 µm)

**- dust free**

1 h (ISO 9117-3:2010)

**- touch dry**

6 h (ISO 9117-5:2012)

**Overcoatable**

surface temperature	by itself	
	min.	max.
+5 °C	20 h	-
+23 °C	12 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.

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

The above information is normative and based on laboratory tests and practical experiences. The information is noncommittal, and we cannot accept liability for the results obtained under working conditions beyond our control, and consequently the buyer or the user is not released from the obligation to test the suitability of our products for specific means and application methods under the actual application conditions. Our liability covers only damage caused directly by defects in the products supplied by Teknos. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos' Technical Data Sheets and Safety Data Sheets are available from our homepage [www.teknos.com](http://www.teknos.com). All trademarks displayed on this document are the exclusive property of Teknos Group or its affiliated companies.