DATA SHEET 111
17 28.02.2020

TEKNODUR 0190
Polyurethane Top Coat

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

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

SPECIAL PROPERTIES
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

Mixing ratio

Base (Comp. A):	4 parts by volume
Hardener (Comp B): TEKNODUR HARDENER 0100/0200	1 part by volume

Pot life, +23 °C
6 h

Solids
50 ±2% by volume

Total mass of solids
abt. 860 g/l

Volatile organic compound (VOC)
abt. 470 g/l

Recommended film thickness and theoretical spreading rate

Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m²/l)
40	80	12,5

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.

Drying time at +23°C / 50% RH (dry film 40 µm)
- **dust free (ISO 9117-3:2010)** after 1 h
- **touch dry (ISO 9117-5:2012)** after 6 h

Overcoatable, 50% RH (dry film 40 µm)

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

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

Thinner
Standard thinners: TEKNOSOLV 9526 and TEKNOSOLV 6220.
Other thinners suitable for the product: see page 2.

Clean up
TEKNOCLEAN 6496

Finish
Gloss

Colours
The paint can be tinted with Teknotint and Teknomix tinting systems.
Same tinting system should be used during the whole painting project.
Factory colours by agreement.

SAFETY MARKINGS
See Safety Data Sheet.

PTO

DIRECTION FOR USE

Surface preparation

Remove from the surfaces any contaminants that might be detrimental to surface preparation and painting. 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.

Mixing of the components

Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. Before painting 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.

Application conditions

The surface to be painted has to be dry. During the application and drying period the temperature of the ambient air, the surface and the paint shall be above +5°C and the relative air humidity below 80%.
Additionally the temperature of the surface to be painted and the paint must be at least 3°C above the dew point of the ambient air.

Application

Before use stir the paint thoroughly.

Apply by conventional spray or airless spray. Suitable airless nozzle size 0.011 - 0.013".

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

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.

Dilute the paint 10 - 30%, when required. Universal diluents or thinners cannot be used, since they may contain alcohol that will react with the hardener.

The hardener of the paint and the ready paint 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.

ADDITIONAL INFORMATION

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.

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

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