

TECHNICAL DATA SHEET

2 23.09.2014

TEKNODUR AQUA 3391

Polyurethane topcoat

DANISH SERIES NUMBER: 3391-XX

PAINT TYPE

TEKNODUR AQUA 3391 is a water borne two pack polyurethane topcoat where the

hardener used is an aliphatic isocyanate resin.

USEThe paint is used as a topcoat in water borne polyurethane systems on substrates

which are exposed to the weather.

TECHNICAL DATA

Mixing ratio Base (Comp. A): 5 parts by volume

Hardener (Comp. B): TEKNODUR AQUA HARDENER 7313 1 part by volume

Potlife +23 °C 1½ hours

Solids $42 \pm 2 \%$ by volume

Total mass of solids Approx. 560 g/l

Volatile organic compound

(VOC)

Approx. 90 g/l

Recommended film thickness and theoretical spreading rate

Dry film (µm)

Wet film (µm) Theoretical spreading rate (m²/l)

95 10.5

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 ½ time of the thickness recommended film

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 2½ hours - touch dry (DIN 53150:1995) After 6½ hours

- fully cured After 7 days

- overcoatable (dry film 40 μm)

Surface	By it self	
temperature	min.	max.*
+10 °C	after 1 day	after 14 days
+23 °C	after 6 hours	after 14 days

^{*} Maximum overcoating interval without roughening.

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

Thinner Water or TEKNOSOLV 1936.

Clean up Water, TEKNOSOLV 6060, TEKNOSOLV 9521.

Finish Semi mat

Colours By agreement

The product is part of the TEKNOCOLOR tinting system.

HEALTH AND SAFETY 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

The base and hardener are mixed together and stirred mechanically thoroughly before application down to the bottom of the vessel. The hardener is mixed undivided and in one go into the base. The stirring time is at least 5 minutes. Inadequate stirring or wrong mixing ratio results in imperfect curing and impaired film properties. Ready paint is to be used within the pot-life (1½ hours). After this the mixture is unfit for use.

Application

For the application it is recommended to use airless spray (nozzle 0.011-0.013") or conventional spray. Conventional spray gives the best result. The components are not to be thinned separately.

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.

Application conditions and drying

The surface to be painted must be dry. During the application and drying period the temperature of the ambient air, the surface and the paint shall be above +10 °C and the relative air humidity below 70 %.

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.

Especially when applying with a spray the relative air humidity should be above 30 % to avoid the onset of the drying process to be too fast.

Surface temperature, film thickness, drying temperature and ventilation affect the drying of the paint. The paint is dry when all water has evaporated from the paint film. It is essential that all painted surfaces have sufficient ventilation. If the painted surface will be exposed to weathering, moisture or low temperatures (below +10 °C) thick paint films are to be avoided and the last coat must be allowed to dry for at least 24 hours (at +23 °C) before exposure.

Low temperatures and insufficient ventilation slow down the drying process.

Cleaning of equipment

When painting equipment used for application of solvent-borne paints is used for water borne paints the equipment must be cleaned carefully:

- 1. Wash with solvent.
- 2. Wash with washing solvent for water-borne paints, e.g. TEKNOSOLV 6060.
- 3. Rinse with water.

When shifting from water-borne to solvent-borne paints act in reverse order.

ADDITIONAL INFORMATION

The storage stability is shown on the label. Store indoors in a cool and dry place in 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 days of opening.

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

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. The latest versions of Teknos' Technical Data Sheets and Safety Data Sheets are available from our homepage www.teknos.com.