

TECHNICAL DATA SHEET

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TEKNODUR COMBI 3442

Polyurethane Paint 3442-XX

PAINT TYPE TEKNODUR COMBI 3442 is a two-pack anticorrosive pigmented polyurethane paint

with low solvent content where the hardener used is an aliphatic isocyanate resin.

USE Used as a one-layer paint. The paint can also be used as a topcoat in polyurethane

and epoxy coating systems.

It is suitable for use on steel, zinc and aluminium surfaces. The paint can be used on several different types of substrates and on many well attached old paint surfaces.

SPECIAL PROPERTIES The paint produces a high gloss film with good mechanical and weather resistance.

The use of TEKNODUR 0250 or TEKNODUR 0290 polyurethane varnish is

recommended on objects when the topcoat is required to have excellent gloss and

colour retention.

TECHNICAL DATA

Mixing ratio Base (Comp. A): 6 parts by volume

Hardener (Comp. B) TEKNODUR HARDENER 7230

1 part by volume

Pot life, +23 °C 1½ hour.

Solids 58 ± 2 % by volume

Total mass of solids 975 g/l

Volatile organic compound

(VOC)

380 g/l

Recommended film thickness and theoretical spreading rate Dry film (µm) Wet film (µm) Theoretical spreading rate (m²/l) 40 67 15 80 133 7.5

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 80 µm)

- dust free (ISO 1517:1973) - touch dry (DIN 53150:1995)

- fully cured

After 30 minutes After 5 hours After 7 days

- overcoatable, 50 % RH (dry film 80 µm)

Surface temperature	By itself	
	min.	max.
+5 °C	after 20 hours	-
+23 °C	after 4 hours	-

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

Thinner Standard thinner: TEKNOSOLV 6220.

Finish 3442-X7: Semi-gloss - gloss

3442-X9: High gloss

Colours

By agreement.

TEKNODUR 3442-09 colours are produced on tinting machine.

HEALTH AND SAFETY

See Safety Data Sheet.

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:

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.

ALUMINIUM SURFACES: Treat the surfaces with Cleaning Agent. Surfaces that are exposed to weathering are also roughened up with sweep blast-cleaning (AlSaS) or sanding.

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

Before use stir the paint thoroughly. If required the paint is diluted with TEKNOSOLV 6220.Do not use universal diluent or thinner, since they react with the hardener. Apply the paint with brush, conventional spray or airless spray. Airless spray nozzle 0.15" - 0.017".

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 both eyes and face are to be protected.

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

Before use clean the spray gun and paint vessels with the paint's own thinner.

Application conditions

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 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.

ADDITIONAL INFORMATION

The storage stability is shown on the label. The hardener reacts with air humidity. Store in a cool and dry place in a tightly closed can.

Use opened hardener within two weeks.

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.