

TEKNODUR COMBI STRUCTURE 3614

2C polyurethane topcoat and single coat paint

TEKNODUR COMBI STRUCTURE 3614 is a two-component, high-solid polyurethane paint with low solvent content. The hardener is an aliphatic isocyanate resin.

It is characterized by quick drying and excellent adhesion on sandblasted steel as well as cold rolled steel. This product builds up an effective corrosion protection, because it contains anti-corrosive pigments. With an appropriate surface preparation it can also be used as one layer coating system.



TECHNICAL DATA

Fields of application	Machinery, Steel constructions		
Recommended substrate	Steel, Zinc		
Binder	Polyurethane		
Solids	Approx. 60% by volume Approx. 76% by weight		
Volatile organic compound (VOC)	Approx. 350 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			
	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m²/l)
	60	100	6.6
	80	135	4.9
	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.		
Colours	RAL 1032 and RAL 7016		
Gloss (60°)	Semi-gloss		
Hardener	Comp. B: TEKNODUR HARDENER 7235 or TEKNODUR HARDENER 7255		
Mixing ratio (A:B)	8:1 parts by volume		
Pot life, +23 °C	5 h		
Thinner	TEKNOSOLV 6740		
Density	Approx. 1.49 g/ml		

Storage

The storage stability is shown on the label. Store in a cool place and in tightly closed containers. 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:

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.

ZINC SURFACES: Hot-dip-galvanized steel structures that are exposed to atmospheric corrosion can be painted if the surfaces are sweep blast-cleaned (SaS) till matt all over. Suitable cleaning agents are, e.g. aluminium oxide and natural sand. It is not recommended according to standard ISO 12944-5 to paint hot-dip-galvanized objects that are subjected to immersion strain. It is recommended that new zinc-coated thin-plate structures are treated with sweep blast-cleaning (SaS).

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.

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, Brush

Application	<p>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.</p> <p>Stir thoroughly before use.</p> <p>Suitable airless nozzle size 0.013 - 0.017"</p> <p>Before use clean the spray gun and paint vessels with a thinner suitable for the paint.</p>
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Application conditions	<p>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. During application good ventilation is recommended.</p>
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Drying time	+23°C / 50% RH (dry film 60 µm)		
- dust free	1 h		
- touch dry	3 h		
Overcoatable	Surface temperature	By itself	
		Min.	Max.
	+23°C	2 h	-
The values given for drying times and overcoatability may vary depending on film thickness and drying conditions.			

Cleaning	TEKNOSOLV 6740
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HEALTH AND SAFETY

Safety and precaution measures	<p>See safety data sheet.</p> <p>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.</p> <p>The hardener can must be opened with caution, as pressure may develop in the can during storage.</p>
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