TEKNODUR 9204-05

2C-polyurethane topcoat

TEKNODUR 9204-05 is a semi-gloss, high-solid polyurethane paint with low solvent content. The hardener is an aliphatic isocyanate resin.

It is characterized by quick drying, good mechanical and weather resistance, as well as excellent adhesion on aluminium and zinc galvanized substrates. TEKNODUR 9204-05 can be used as a topcoat in polyurethane coating systems in combination with a primer. With an appropriate surface preparation (ironphosphated or zincphospated, Sa 2½) it can also be used as one layer coating system.

TECHNICAL DATA

Fields of application	Machinery, Steel constructions
Recommended substrate	Aluminium, Steel, Zinc
Binder	Polyurethane
Solids	Approx. 60% by volume Approx. 76% by weight
Volatile organic compound (VOC)	Approx. 358 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	<table><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m^2/l)</th></tr><tr><td>60</td><td>100</td><td>10.0</td></tr><tr><td>80</td><td>130</td><td>7.5</td></tr></table> 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	Same tinting system should be used during the whole painting project.
Tinting system	Teknotint
Gloss (60°)	Semi-gloss
Hardener	Comp. B: TEKNODUR HARDENER 7235 or TEKNODUR HARDENER 7500
Mixing ratio (A:B)	8:1 parts by volume
Pot life, +23°C	3 h
Thinner	TEKNOSOLV 6740

Density	Approx. 1.48 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). ALUMINIUM SURFACES: 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. 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	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. Stir thoroughly before use. Suitable airless nozzle size 0.011 - 0.013". Before use clean the spray gun and paint vessels with a thinner suitable for the paint.
Application conditions	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.
Drying time	+23 °C / 50% RH (dry film 60 µm)
- dust free	20 min
- touch dry	1.5 h
- forced drying	1 h at 60 °C
Overcoatable	

Surface temperature	By itself	
	Min.	Max.
+23 °C	4 h	-

Given times relates to the recommended coating thickness, drying in good ventilation conditions. Increase in film thickness and rise in the relative humidity of the air in the drying space usually slow down the drying process.

Cleaning	TEKNOSOLV 6740

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.

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