TEKNODUR COMBI 3560-09

Ultra high solids polyaspartic coating

TEKNODUR COMBI 3560-09 is a two pack polyaspartic based polyurethane paint. The hardener is an aliphatic isocyanate resin.

TEKNODUR COMBI 3560-09 is an anticorrosion pigmented paint suitable to use as a one-layer paint on metal surfaces. The coating provides a highly durable finish with good resistance against weathering.

The use of TEKNODUR 0290 polyurethane Varnish is recommended on objects when the topcoat is required to have excellent gloss and colour retention.

TECHNICAL DATA

Recommended substrate	Steel, Aluminium, Zinc
Binder	Polyurethane
Solids	TEKNODUR HARDENER 7226 93 ±2% by volume TEKNODUR HARDENER 7227 87 ±2% by volume
Total mass of solids	TEKNODUR HARDENER 7226 approx. 1600 g/l TEKNODUR HARDENER 7227 approx. 1500 g/l
Volatile organic compound (VOC)	TEKNODUR HARDENER 7226 approx. 70 g/l TEKNODUR HARDENER 7227 approx. 120 g/l 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	See table below.

Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m^2/l)
TEKNODUR HARDENER 7226		
80	86	11.6
120	129	7.8
200	215	4.6
TEKNODUR HARDENER 7227		
80	92	10.9
120	138	7.3
200	230	4.4

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	By agreement.

Tinting system	Teknotint
Gloss (60°)	Gloss
Hardener	Comp. B: TEKNODUR HARDENER 7226 or TEKNODUR HARDENER 7227
Mixing ratio (A:B)	

Comp. B	Parts by volume (A : B)
TEKNODUR HARDENER 7226	3 : 1
TEKNODUR HARDENER 7227	2.4 : 1

Pot life	TEKNODUR HARDENER 7226 1 h TEKNODUR HARDENER 7227 1 h
Storage	The storage stability is shown on the label. Store indoors in a cool and dry place and in a tightly closed can. The product is moisture-accelerated, therefore unnecessary opening of the Comp. A can might lead to shortened pot life. 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). The profile of the blast-cleaned surface should be coarse (reference comparator "G") ISO 8503-2 (G). 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. 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. Painting of hot-dip-galvanized objects that are subjected to immersion strain must be discussed separately with Teknos. ALUMINIUM SURFACES: Treat the surfaces with RENSA STEEL washing agent. Surfaces that are exposed to weathering are also roughened up with sweep blast-cleaning (AlSaS) or sanding. 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 Suitable airless nozzle size 0.013 - 0.017"

Application	MIXING OF THE COMPONENTS: Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. The base must be stirred until it is homogeneous before mixing the components. Before application the base and hardener are mixed in right proportion. Stir thoroughly down to the bottom of the vessel. The stirring time is at least 5 min. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties. Stir thoroughly before use. 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 and the relative air humidity below 80%. During the application and drying period the temperature of the ambient air and the surface shall be at least above -5°C, and the temperature of the product above +15°C during mixing and spraying. 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. Curing of the product is moisture-accelerated. For efficient curing, adequate moisture level is needed. To enable efficient solvent evaporation, good airflow over the painted surface is recommended during flash off and drying. Oven-curing (above +35°C) is not recommended. For further information, please contact Teknos representatives.
Thinning	Thin the paint (max. 5 vol-%) when needed with TEKNOSOLV 9526. Other thinners: TEKNOSOLV 1129 (fast thinner) or TEKNOSOLV 6622 (slow thinner). Do not use universal thinners, since they may contain alcohol which will react with the hardener.
Drying time	+23°C / 50% RH (dry film 120 µm)
- dust free	40 min (ISO 9117-3:2010)
- touch dry	2,5 h (ISO 9117-5:2012)
- through dry	4 h (ISO 9117-1:2009)

Overcoatable

surface temperature	by itself	
	min.	max.
+5°C	12 h	24 h
+23°C	5 h	8 h

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.

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