TEKNORAN COMBI 1485-80

Single coat structure paint based on oxirane ester

TEKNORAN COMBI 1485-80 is a two-component, isocyanate-free single coat paint with high solids content and based on oxirane ester. Contains active anti-corrosive pigments. Product coating on steel surfaces within the engineering industry. The solvent emissions of the paint are low due to the high volume solids content.

The paint dries both in elevated and in room temperatures. Welding of the painted surface is to be avoided. Paint gives a structured surface.

TECHNICAL DATA

Fields of application	Machinery, Steel constructions, Transportation equipment
Recommended substrate	Aluminium, Steel, Zinc
Solids	Approx. 68% by volume
Total mass of solids	Approx. 1370 g/l
Volatile organic compound (VOC)	Approx. 307 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>80</td><td>117</td><td>8.5</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	By agreement.
Gloss (60°)	Full-matt
Hardener	Comp. B: TEKNORAN HARDENER 1475-51
Mixing ratio (A:B)	2:1 parts by volume
Pot life, +23°C	4 h
Thinner	TEKNOSOLV 1135-25, TEKNOSOLV 1602, TEKNOSOLV 7140-00, TEKNOSOLV 6120-00.

Storage	The storage stability is shown on the label. Store in a cool place and in tightly closed containers.
Packaging	Available in a range of standard pack sizes.

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. When using chemical pretreatment the suitability of the treatment is to be checked from the paint manufacturer.

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. It is recommended that new zinc-coated thin-plate structures are treated with sweep blast-cleaning (SaS). Thin-plate surfaces that have been weathered to matt can be treated also with RENSA STEEL washing agent for galvanized surfaces.

ALUMINIUM SURFACES: Treat the surfaces with RENSA STEEL washing agent for galvanized 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. KORRO PVB Prefabrication Primer and KORRO E Epoxy Prefabrication Primer can be used, when required.
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. Apply preferably by airless spray as only this method provides the recommended film thickness in a single operation. Suitable airless nozzle size 0.011 - 0.013". Brush can be used for touching up and painting small areas.
Application conditions	The surface to be treated has to 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%.
Drying time	+23°C / 50% RH (dry film 80 µm)
- dust free	1 h (ISO 9117-3:2010)
- touch dry	4 h (DIN 53150:1995)
- forced drying	+80°C / 30 min.
Overcoatable	

	by itself	
Surface temperature	min.	max.
+10°C	24 h	-
+23°C	2 h	-

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 1135-25, TEKNOSOLV 1602, TEKNOSOLV 7140-00, TEKNOSOLV 6120-00.

HEALTH AND SAFETY

Safety and precaution measures	See safety data sheet.

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