

TEKNOPLAST 90

Epoxy Top Coat

PAINT TYPE	TEKNOPLAST 90 is a gloss, two-pack epoxy top coat.
USAGE	Used as a top coat in abrasion and chemical resistant Epoxy Coating Systems K18, K19, K22 and K36 and also in maintenance coating systems K46 and K56. The paint has good adhesion to bare zinc, aluminium, thin-plate and acid-proof steel.
SPECIAL PROPERTIES	TEKNOPLAST 90 is quickly overcoatable and is therefore suited to a fast painting tempo. It is also well suited for application done by twin-feed spray. The paint film withstands heavy abrasion, aqueous solutions of chemicals, oils, grease and solvents. TEKNOPLAST 90 withstands dry heat up to +120°C. Frequent attacks by heat may cause the colour to change. The paint comes up to the specifications set in the Swedish standard SSG 1026-TA. TEKNOPLAST WINTER HARDENER 7212 (data sheet no. 1317) is to be used when painting at temperatures below +10°C . When using the WINTER hardener it will strengthen the yellowing and chalking that is typical for epoxy paints.

TECHNICAL DATA

Mixing ratio	Base (Comp. A): Hardener (Comp B): TEKNOPLAST HARDENER	4 parts by volume 1 part by volume
Pot life, +23 °C	4 h	
Solids	53 ±2% by volume	
Total mass of solids	abt. 760 g/l	
Volatile organic compound (VOC)	abt. 430 g/l	
Recommended film thickness and theoretical spreading rate	Dry film (µm)	Wet film (µm)
	60	113
	80	150
		Theoretical spreading rate (m ² /l)
		8,8
		6,6

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, +23°C / 50% RH (dry film 60 µm)
 - dust free (ISO 9117-3:2010) after 1 h
 - touch dry (ISO 9117-5:2012) after 4 h
 - fully cured after 7 days

Overcoatable, 50% RH (dry film 60 µm)

surface temperature	by itself	
	min.	max.*
+10°C	after 6 h	after 1 month
+23°C	after 2 h	after 1 month

* Maximum overcoating interval without roughening.

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 9506
Clean up	TEKNOSOLV 9506 or TEKNOPLAST 9530
Finish	Gloss
Colours	The paint can be tinted with Teknotint and Teknomix tinting systems. Same tinting system should be used during the whole painting project.

SAFETY MARKINGS 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:

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). 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.

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 conditions

The surface to be painted must be dry. During the application and drying period the temperature of the ambient air, the surface and the paint shall be above +10°C and the relative air 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.

When using TEKNOPLAST WINTER HARDENER 7212 the temperature of the ambient air and the surface to be painted shall be over -5°C. The temperature of the paint during the mixing and application is to be above +15°C.

Application

Before use stir the paint thoroughly.

If needed, thin the paint with TEKNOSOLV 9506.

Apply preferably by airless spray as only this method provides the recommended film thickness in a single operation. Use airless spray nozzle 0.011 - 0.013". Brush can be used for touching up and painting small areas.

When twin-feed spray is used for application, the mixing ratio of the dosage pump must be 4:1. The feed pump pressure and the consumption of components is to be checked during application to ensure of the correct mixing ratio. The components cannot be thinned if twin-feed spray with fixed ratio is used.

ADDITIONAL INFORMATION

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

Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos data sheets, material safety data sheets and system sheets are on our home pages www.teknos.com.



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