

TEKNOPLAST 90

Epoxy top coat

TEKNOPLAST 90 is a gloss, two-pack epoxy top coat.

Use: As a top coat in abrasion and chemical resistant Epoxy Coating Systems and also in maintenance coating systems. The paint has good adhesion to bare zinc, aluminium, thin-plate and acid-proof steel.



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

Certificates, approvals and classification	SSG 1026-TA		
Recommended substrate	Steel, Aluminium, Zinc, Concrete		
Binder	Epoxy		
Solids	53 ±2% by volume		
Total mass of solids	Approx. 760 g/l		
Volatile organic compound (VOC)	(For mixed product, base and hardener ratio 4:1) Approx. 430 g/l (Theoretical, according to IED 2010/75/EU) 367 g/l (Tested according to China GB/T 23985-2009)		
Theoretical spreading rate	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m²/l)
	60	113	8.8
	80	150	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.		
Colours	Same tinting system should be used during the whole painting project.		
Tinting system	Teknomix; Teknotint		
Gloss (60°)	Gloss		
Hardener	Comp. B: TEKNOPLAST HARDENER		
Mixing ratio (A:B)	4:1 parts by volume		
Pot life, +23°C	4 h		

Thinner	Standard thinner: TEKNOSOLV 9506.
Storage	The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

DIRECTION FOR USE

Surface preparation	<p>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:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.</p>
Application method	Airless spraying

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.

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.

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.

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 +10°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.

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.

Thinning

If needed, thin the paint with TEKNO SOLV 9506.

Drying time

+23 °C / 50% RH (dry film 60 µm)

-dust free

1 h (ISO 9117-3:2010)

-touch dry

4 h (ISO 9117-5:2012)

-fully cured

7 d

Overcoatable

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

Cleaning

TEKNO SOLV 9506 or TEKNO SOLV 9530.

HEALTH AND SAFETY

Safety and precaution measures

See safety data sheet.

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