

TEKNOPOX PRIMER 7-00

Fast Drying Epoxy Primer

TEKNOPOX PRIMER 7-00 is a fast curing two-pack epoxy primer containing anticorrosive pigments (zinc phosphate). The product cures also in low temperatures (above -10°C).



The paint is used as anticorrosive coating, primer or intermediate coat in painting systems suited for fast recoating with another layer or in automated painting systems. It is also suitable for anticorrosive systems for road and rail transport vehicles.

The very smooth, matt surface, hard, mechanically resistant and well attached to subjects. The surface is resistant to atmospheric conditions. Exposed to direct sun radiation, the surface may chalk or change the shade.



TECHNICAL DATA

Fields of application	Machinery, Steel constructions, Transportation equipment
Recommended substrate	Steel, Zinc
Binder	Epoxy
Solids	65±1% by volume (ISO 3233)
Total mass of solids	Approx. 1200 g/l
Volatile organic compound (VOC)	Approx. 320 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	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m²/l)
	80	123	8.1
	100	154	6.5
	150	230	4.3

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	TO-880 dark grey, TO-010 white, RAL 7011
Gloss (60°)	Matt
Hardener	Comp. B: TEKNOPOX HARDENER 7377
Mixing ratio (A:B)	7:1 parts by volume

Pot life, +23°C	3 h
Thinner	Not needed. If needed (eg. rise in viscosity) use 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>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.</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. From the bare steel surfaces the rust is removed to preparation grade St 2 (ISO 8501-1).</p> <p>HOT-DIP-GALVANIZED STEEL AND ALUMINIUM SURFACES 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 should be zinc corrosion products free (white rust free) and any contaminant-free. The surface to be treated must be dry, clean, salt-, grease- and dust-free.</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, 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. Mixing by machine is recommended, for example a slow-rotating hand-drill equipped with a mixer. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties.

Apply by airless spray, air spray or brush (only for small areas). For brush painting it is recommended to thin paint (abt. 3% of thinner) and to paint several times to achieve typical dry film thickness.

Airless spray parameter:

Nozzle size 0.013 - 0.017"

Nozzle pressure 20 - 30 MPa

For air spray application it is recommended to thin the paint to 20-25 seconds according to Ford cup Ø4.

When preparing painting specification, depending on subject and type of construction, different dry film thickness than recommended can be assumed. During airless spray application typical dry film thickness range is between 80 and 300 µm. Different dry film thickness than recommended causes change in theoretical spreading rate, wet film thickness, weight of dry film thickness, drying time, overcoating time and ready for handling time.

Application conditions

During the application and drying period the temperature of the ambient air shall be above -10°C, of the paint should be over +15°C and the relative air humidity below 85%. The minimum temperature of the surface shall be above -5°C (frost- and ice-free surface) and at least 3°C higher than dew point of the ambient air. Adequate ventilation during application and drying period is recommended.

Drying time	+23 °C / 50% RH (dry film 100 µm)				
- dust free	after 15 min				
- touch dry	after 45 min				
- fully cured	after 5 days				
Overcoatable	Surface temperature	By itself		By polyurethane top coats from Emapur, Teknodur 70 5-00 or Teknodur 0050 groups**	
		Min.	Max.	Min.	Max.
	-5 °C	9 h	2 months*	9 h	1 month*
	0 °C	4,5 h	2 months*	4,5 h	1 month*
	+5 °C	3 h	2 months*	3 h	1 month*
	+10 °C	2 h	2 months*	2 h	1 month*
	+23 °C	45 min	2 months*	45 min	1 month*
<p>*unlimited in internal conditions. A completely clean surface is mandatory to ensure the best intercoat adhesion. If the maximum overcoating interval has been exceeded, the surface must be roughened before overcoating. Increase in film thickness and rise in the relative humidity of the air in the drying space slow down the drying process and effect the overcoating properties.</p> <p>**If some other top coats besides the ones mentioned above are used, please contact Teknos representative for overcoating recommendations.</p>					

Cleaning TEKNO SOLV 9506

HEALTH AND SAFETY

Safety and precaution measures See safety data sheet.

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