

TEKNOPOX PRIMER 87-00 MIOX

Epoxy Primer

TEKNOPOX PRIMER 87-00 MIOX is a MIO pigmented, thixotropic, high solid, epoxy primer, cured in temperatures above -10°C.

The paint is used for priming of steel constructions operating in sea, coastal and industrial environment. In addition, it is used for priming steel and cast iron constructions exposed to destructive mechanical factors.

The semi-matt, hard coating, with good adhesion to surfaces and resistant to mechanical factors. The coating is also resistant to atmospheric conditions. Exposed to direct sun radiation, the surface may chalk or change the shade.



TECHNICAL DATA

Fields of application	Steel constructions		
Recommended substrate	Cast iron, Steel		
Binder	Epoxy		
Solids	80±2% by volume (ISO 3233)		
Total mass of solids	Approx. 1450 g/l		
Volatile organic compound (VOC)	Less than 250 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)
	100	125	8.0
	150	190	5.3
	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-250 red oxide, TO-820 ash grey		
Gloss (60°)	Semi-matt		
Hardener	Comp. B: TEKNOPOX HARDENER 7377		
Mixing ratio (A:B)	100:23 parts by volume		
Pot life, +23 °C	1,5 h		

Thinner

If needed (eg. thickening of product, application in lower temperature, application in lower dry film thickness) use TEKNOSOLV 9506 up to 15%.

Storage

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

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) for submerged areas or at least St 3 for external surfaces. For internal surfaces at least St 2 is recommended. Porous surfaces should be primed with thinned TEKNOPOX PRIMER 87-00 MIOX paint. Roughening the surface of thin-plate improves the adhesion of the paint to the substrate. Coating gets the highest mechanical and chemical resistance by applying directly to sandblast cleaned steel surfaces (cleanliness at least Sa 2½ according to ISO 8501-1).

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

Airless spray parameter:

Nozzle size 0.019 - 0.023"

Nozzle pressure 20 - 25 MPa

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 70 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 45 min			
- touch dry	after 2 h			
- 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	24 h	1 month*	24 h 1 month*
	0 °C	12 h	1 month*	12 h 1 month*
	+5 °C	7 h	1 month*	7 h 1 month*
	+10 °C	3 h	1 month*	3 h 1 month*
	+23 °C	2 h	1 month*	2 h 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 TEKNOSOLV 9506

HEALTH AND SAFETY

Safety and precaution measures See safety data sheet.

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