TEKNOPOX 74-01 (EPINOX 74-01)



Epoxy primer

Two-component, thixotropic, thick-layer epoxy primer, pigmented with flake materials.

For priming of steel constructions operating in sea, coastal and industrial environment, steel and cast iron constructions exposed to destructive mechanical factors.

Flexible coating provides very good anticorrosive properties. The coating is resistant to sun radiation. The main advantage – significantly longer overcoating window for both epoxy and polyurethane coatings, in comparison to classic epoxy primers.

TECHNICAL DATA

Fields of application	Machinery, Steel constructions
Recommended substrate	Cast iron, Steel
Binder	Epoxy
Solids	60±1% by volume (ISO 3233)
Total mass of solids	Approx. 1300 g/l
Volatile organic compound (VOC)	Approx. 360 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 (m^2/l)
100	160	6.3
150	250	4.0

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-840 silver grey
Gloss (60°)	Matt
Hardener	Comp. B: TEKNOPOX HARDENER 7474 (EPINOX 74 UTWARDZACZ)
Mixing ratio (A:B)	3,5:1 parts by volume
Pot life, +23°C	3,5 h
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	Before cleaning of surface, it is recommended to wash it with water with addition of TEKNOCLEAN 123 (OLICLEAN 123) and then rinse with fresh water. The surfaces are prepared according to the different materials as follows: STEEL SURFACES: The surface to be treated must be dry, salt-, grease- and dust-free, cleaned to the degree of cleanliness according to ISO 8501-1 at least Sa 2½ for submerged areas or at least St 3 for external surfaces. For internal surfaces at least St 2. Porous surfaces should be primed with thinned TEKNOPOX 74-01 (EPINOX 74-01). 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). COATING OF EPOXY PAINT: The surface to be treated must be dry, salt-, dust-, grease- and corrosion-free. 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. Wait 15 min (at 23°C) before use. 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 or brush. When using a brush it may be necessary to apply several layers to achieve recommended coating thickness. Airless spray parameter: Nozzle size 0.019 – 0.025" 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 100 and 250 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. In high corrosive environment it is recommended to prepare surface as best as possible and to apply successive layers of paint before full curing of previous layers to achieve best protection. It should be remembered that increasing the degree of cleanliness of the substrate extends the durability of the paint coating.
Application conditions	During the application and drying period the temperature of the ambient air and the surface shall be above +5°C and at least 3°C higher than dew point of the ambient air. Minimum paint temperature should be +15°C and the relative air humidity below 85%. Adequate ventilation during application and drying period is recommended.

Drying time	+23 °C / 50% RH (dry film 100 µm)
- dust free	2 h
- touch dry	7.5 h
- fully cured	7 days
Overcoatable	

Surface temperature	By itself		By topcoats	
	Min.	Max.	Min.	Max.
+5°C	12 h	15 months*	12 h	15 months*
+10°C	10 h	15 months*	10 h	15 months*
+23°C	7.5 h	15 months*	7.5 h	15 months*

*unlimited in internal conditions. Before painting the coating which was exposed for long time to atmospheric conditions, it is recommended to remove dust and other contamination of the surface. It is recommended to wash it with water with addition of TEKNOCLEAN 123 (OLICLEAN 123) and then rinse with fresh water.
In case of situation when maximum overcoating time is exceeded and in case of calking, it is recommended to remove degradation products of the coating with mechanical methods.
Given indications relates to the recommended coating thickness, drying in good ventilation conditions. Overcoating times may be different with a change of temperature, ventilation, number of layers and the thickness of the coating.

Cleaning	TEKNOSOLV 9506

HEALTH AND SAFETY

Safety and precaution measures	See safety data sheet.

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