TEKNOZINC 21 (EPINOX 21)



Zinc-rich epoxy primer

A two-component, fast curing, metallic, zinc-rich epoxy primer cured with polyaminoamide

For priming of steel constructions operating in marine and industrial environment e.g. bridges, flyovers, pipelines, supporting structures etc.

Coating with good mechanical properties and outstanding adhesion to the surfaces, resistant to corrosive factors of marine and industrial atmosphere and periodical influence of temperature up to 150°C. Not resistant to acid and alkali environment. Available in ASTM D520, type II zinc dust version as a standard. Zinc content in the dry coating min. 80%.

TECHNICAL DATA

Fields of application	Bridge, Pipelines, Steel constructions
Recommended substrate	Steel
Binder	Epoxy
Solids	66±2% by volume
Total mass of solids	Approx. 2600 g/l
Volatile organic compound (VOC)	Approx. 300 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	<table><tr><th>Dry film (µm)</th><th>Wet film (µm)</th><th>Theoretical spreading rate (m^2/l)</th></tr><tr><td>80</td><td>121</td><td>8.3</td></tr></table> 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-950 metallic grey
Gloss (60°)	Matt
Hardener	Comp. B: TEKNOZINC HARDENER 7430 (UTWARDZACZ 030)
Mixing ratio (A:B)	100:12 parts by volume
Pot life, +23°C	8 h
Thinner	Not required. If necessary (eg. thickening of product) 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	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. Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.
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. Mix thoroughly components and wait 15 minutes (at 23 °C) before use. After mixing the components, it is recommended to filter the mixture through the sieve mesh 900/cm². Apply by airless spray, air spray (with the use of guns with upper hopper or paint feeding from a separate hopper) or brush (in the case of corrections or small surfaces). It is necessary to mix the paint continuously during painting, due to settlement of the metallic pigment. Airless spray parameter: Nozzle size 0.017 - 0.021". 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 50 and 90 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. The compartment must be ventilated during and after painting as long as the odour is sensible.

Application conditions	During the application and drying period the temperature of the ambient air and the surface shall be above +10°C and the relative air humidity below 85%. The temperature of the surface to be treated must be at least +3°C above the 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	30 min
- touch dry	1.5 h
- fully cured	7 days

Overcoatable

Surface temperature	By itself		By topcoats	
	Min.	Max.	Min.	Max.
+10°C	4 h	unlimited*	4 h	unlimited*
+23°C	2 h	unlimited*	2 h	unlimited*

*unlimited in internal conditions. It is a rule, that unlimited overcoating interval is for TEKNOZINC 21 (EPINOX 21). Due to higher sensitivity of topcoats to surface cleanness, overcoating time should be short. It is very important especially when applying non-epoxy systems or operating in aggressive environment. 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. In case of chalking, it is recommended to remove degradation products.

Cleaning	TEKNOSOLV 9506

HEALTH AND SAFETY

Safety and precaution measures	See safety data sheet.

Teknos Group Oy Takkatie 3, P.O.Box 107 FI-00371 Helsinki, Finland Tel. +358 9 506 091

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