TEKNOMASTIC 2000 (EPIRUSTIK 2000)



Epoxy primer

Epoxy primer, MIO pigmented, thixotropic, high solid, two component, cured in low temperatures (from -10°C). The coating can be applied on wet and poorly prepared surfaces, is not sensitive to water (rain) when cured to touch dry degree.

For priming or self-protection of (when high decorative value of coating is not required): steel, aluminium operating in sea and industrial environment. For renovation of old alkyd-, acrylic-, polyvinyl-, chlorinated rubber, epoxy- and polyurethane coatings.

The coating is flexible and mechanically resistant. The coating resistant to water, salt water, salt and alkali solutions, oil, fuel oil, diesel, motor gasoline and some organic solvents. Coating resistant to the elements occurring in the cathodic protection.

TECHNICAL DATA

Fields of application	Steel constructions
Recommended substrate	Steel, Aluminium
Binder	Epoxy
Solids	80±2% by volume (ISO 3233)
Total mass of solids	Approx. 1340 g/l
Volatile organic compound (VOC)	Approx. 280 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	See table below
Practical spreading rate	The values depend on the application technique, surface conditions, overspray, etc.
Colours	TO-250 red oxide, TO- 860 light grey , TO-330 mustard
Gloss (60°)	Semi-matt
Hardener	Comp. B: TEKNOPOX HARDENER 7466 (UTWARDZACZ 080/082)
Mixing ratio (A:B)	100:30 parts by volume

Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m^2/l)
100	125	8.0
150	187	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.

Pot life, +23°C	2,5 h
Thinner	TEKNOSOLV 1639
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, without any contamination (grease-, salt-, dust-free), cleaned to the degree of cleanliness according to PN-ISO 8501-1: at least Sa 2½ for constructions used in the aggressive environment, where long term protection is needed; St 3 for constructions used in the industrial environment; St 2 for constructions used in coastal and urban environment and for internal exposure. It is possible to use it on wet surfaces. Porous surfaces primed with thinned TEKNOMASTIC 2000 (EPIRUSTIK 2000). STEEL SURFACES PREVIOUSLY PRIMED USING SHOPPRIMER: The surface to be treated must be dry and without any contamination (grease-, salt-, dust-free). Rust, mechanical, thermal damage or any defects of surface should be cleaned to Sa 2 according to PN-ISO 8501-1 for immersion; St 3 for external exposure. For internal surfaces cleanliness at least St 2. Surfaces covered with epoxy shopprimer without visible defects, abrasive blasted (submerged surfaces) or roughened mechanically (external surfaces). DRY ALUMINIUM SURFACES: The surface to be treated must be tarnished, grease-, salt- and dust-free. OLD COATING SURFACES: The surface to be treated must be grease-, salt- and dust-free. It is recommended to remove all loose parts and rust, wash it down with water under pressure. An alternative method to dry cleaning is cleaning with a jet of water, advantageously with an abrasive additive, at a pressure of more than 70 MPa. It can be used on intact, well adhered paint coatings and/or steel. The surface cleanliness of the steel after cleaning must be at least Wa 2 (ISO 8501-4:2006) or according to specification. Before painting, a maximum of L (ISO 8501-4:2006) rust grade is allowed. After cleaning, intact paint coatings must have a rough surface texture.The coating can be applied on wet surfaces. It is recommended to make small scale trials before application on wet surfaces or old coatings. 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. Wait 10 minutes (in 23°C) before use. Apply by airless spray or brush. When using a brush it is recommended to dilute paint (by adding abt. 3% by volume of TEKNOSOLV 1639) and it may be necessary to apply several layers to achieve recommended coating thickness. For wet and rusted surfaces it is recommended to apply first layer by brush. The paint used for priming porous surfaces should be diluted by adding 15-20% of TEKNOSOLV 1639. Airless spray parameter: Nozzle size 0.019 – 0.025" Nozzle pressure 15 - 20 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 170 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. It is not recommended to apply TEKNOMASTIC 2000 (EPIRUSTIK 2000) on wet or covered with water drops surfaces.
Application conditions	During the application and drying period the minimum temperature of the substrate shall be above -5°C (frost- and ice-free surface). Minimum paint temperature +15°C. During application good ventilation is recommended. The paint can be applied on moist surfaces. The moist surfaces should be understood as: surfaces after hydroblasting; surfaces with the temperature below dew point, on which water is imperceptible.

Drying time	+23°C / 50% RH (dry film 100 µm)
- dust free	3 h
- touch dry	6 h
- fully cured	3 days

Overcoatable

Surface temperature	By itself		By topcoats	
	Min.	Max.	Min.	Max.
-5°C	34 h	unlimited*	34 h	unlimited*
0°C	24 h	unlimited*	24 h	unlimited*
+5°C	16 h	unlimited*	16 h	unlimited*
+10°C	12 h	unlimited*	12 h	unlimited*
+20°C	8 h	unlimited*	8 h	unlimited*

*it is a rule, that unlimited overcoating interval is for TEKNOMASTIC 2000 (EPIRUSTIK 2000). 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.

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