

PAINT TYPE

Epoxy epoxy primer, MIO pigmented, thixotropic, high solid, two component, cured in low temperatures (from -10°C).

USAGE

For priming of steel ship's steel hulls; steel constructions operating in sea, coastal and industrial environment; steel and cast iron constructions exposed to destructive mechanical factors. For self-protection of steel constructions and elements, when high decorative value of coating is not required; steel tanks for most of chemical media, i.e. water, sewage, petroleum products, ship's holds and internal surfaces.

SPECIAL PROPERTIES

Flexible and hard coating, with good adhesion to surfaces and resistant to mechanical factors. The coating resistant to 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. When exposed to sun radiation, the tint of the coating may change and the coating may be chalking.

TECHNICAL DATA

Mixing ratio

Base (Comp. A): 100 parts by volume
Hardener (Comp. B): UTWARDZACZ 077 20 parts by volume

Pot life; +20°C

3,5 h

Solids (ISO 3233)

73±1% by volume

Total mass of solids

abt. 1300 g/l

Volatile organic compounds (VOC)

abt. 300 g/l

Recommended film thickness and theoretical spreading rate

Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m ² /l)
100	137	7,3
150	205	4,9

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.

Drying time at +23°C / 50% RH (for 100 µm dry film thickness)

- dust free
- touch dry
- fully cured

after 2 h
after 6 h
after 2 days

Overcoatable (for 100 µm dry film thickness)

surface temperature	by itself		by topcoats	
	min.	max.	min.	max.
-5°C	24 h	unlimited*	24 h	unlimited*
0°C	14 h	unlimited*	14 h	unlimited*
+5°C	9 h	unlimited*	9 h	unlimited*
+10°C	7,5 h	unlimited*	7,5 h	unlimited*
+20°C	6 h	unlimited*	6 h	unlimited*

*unlimited in internal conditions. It is a rule, that unlimited overcoating interval is for EPINOX 77. 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.

Thinner, clean up

TEKNOSOLV 564.

Finish	Semi-gloss				
Colours	TO-250 red oxide TO- 860 light grey TO-990 black				
SAFETY MARKINGS	See Safety Data Sheet				
DIRECTION FOR USE					
Surface preparation	<p>Before cleaning of surface, it is recommended to wash it with water with addition of OLICLEAN 123 and then rinse with fresh water.</p> <p>Steel surface cleaned to the degree of cleanliness according to ISO 8501-1: 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 tinted Epinox 77 paint. Coating gets the highest mechanical and chemical resistance by applying directly to sandblast cleaned steel surfaces (cleanliness at least Sa 2½). Dry, salt-, grease-and dust-free surface.</p> <p>Steel surface previously primed using shopprimer should be dry and free of contamination. Rust, mechanical, thermal damage or any defects of surface should be cleaned to Sa 2 according to PN-ISO 8501-1 for submerged surfaces, St 3 for external above-water surfaces. For internal surfaces at least St 2. Shopprimed coating without visible defects, abrasive blasted (submerged surfaces) or roughened mechanically (external surfaces).</p>				
Mixing of the components	Take into consideration the pot life of the mixture when estimating the amount to be mixed at a time. Before painting the base and hardener are mixed in right proportions. Stir thoroughly down to the bottom of the vessel. Mixing by machine is recommended, for example a slow-rotating hand-drill equipment with a mixer. Inadequate stirring or incorrect mixing ratio results in imperfect curing and impaired film properties.				
Application conditions	During the application and drying period the minimum temperature of the surface shall be above -5°C (frost- and ice-free surface), at least 3°C above the dew point of the ambient air. Minimum ambient air temperature -10°C. Maximum humidity 95%. Minimum paint temperature +15°C. Adequate ventilation during application and drying.				
Application	<p>Airless spray, brush. When using a brush it may be necessary to apply several layers to achieve recommended coating thickness.</p> <p>Airless spray parameter:</p> <table border="0" style="margin-left: 200px;"> <tr> <td>Nozzle size</td> <td>0,48 - 0,63 mm</td> </tr> <tr> <td>Nozzle pressure</td> <td>20 - 25 MPa</td> </tr> </table> <p>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 200 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.</p> <p>Single coating of dry film thickness 160 – 200 µm (wet film thickness 250 – 320 µm) can be used as a stand-alone protection of internal surfaces, for example for ship's holds. 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.</p>	Nozzle size	0,48 - 0,63 mm	Nozzle pressure	20 - 25 MPa
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ADDITIONAL INFORMATION	The storage stability is shown on the label. Store in cool place and in tightly closed can. Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.				

The information of this data sheet is normative and based on laboratory tests and practical experience. Teknos guarantees that the product quality conforms to our quality system. Teknos accepts, however, no liability for the actual application work, as this is to a great extent dependent on the conditions during handling and application. Teknos accepts no liability for any damage resulting from misapplication of the product. This product is intended for professional use only. This implies that the user possesses sufficient knowledge for using the product correctly with regard to technical and working safety aspects. The latest versions of Teknos data sheets, safety data sheets and system sheets are on our home pages www.teknos.com.
