

# EPINOX 87

## Epoxy primer

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

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

Flexible, semi-matt 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. When exposed to sun radiation, the tint of the coating may change.



## TECHNICAL DATA

<b>Fields of application</b>	Machinery, Steel constructions
<b>Recommended substrate</b>	Aluminium, Cast iron, Steel
<b>Binder</b>	Epoxy
<b>Solids</b>	81±2% by volume
<b>Total mass of solids</b>	Approx. 1320 g/l
<b>Volatile organic compound (VOC)</b>	Approx. 290 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.

<b>Theoretical spreading rate</b>	<b>Dry film (µm)</b>	<b>Wet film (µm)</b>	<b>Theoretical spreading rate (m<sup>2</sup>/l)</b>
	100	125	8.0
	200	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-250 red oxide, TO-820 ash grey, TO-860 light grey\*  
\*The light grey color (TO-860) contains active anticorrosive pigments (zinc phosphate, aluminium) and MIO. The color is available only on customers' request.

**Gloss (60°)** Semi-matt

<b>Hardener</b>	Comp. B: UTWARDZACZ 076/077/087/EPITAN 92
<b>Mixing ratio (A:B)</b>	100:19 parts by volume
<b>Pot life, +23 °C</b>	2,5 h
<b>Thinner</b>	If needed (eg. thickening of product, application in lower temperature, application in lower dry film thickness) use TEKNOSOLV 9506 up to 15%.
<b>Storage</b>	The storage stability is shown on the label. Store in a cool place and in tightly closed containers.

## DIRECTION FOR USE

<b>Surface preparation</b>	<p>Before cleaning of surface, it is recommended to wash it with water with addition of OLICLEAN 123 and then rinse with fresh water. The surfaces are prepared according to the different materials as follows:</p> <p>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 EPINOX 87-01 paint. 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).</p> <p>THE SURFACE OF EPOXY PRIMER: The surface to be treated must be dry, clean, salt-, grease- and dust-free.</p> <p>Additional instructive information for surface preparation can be found in standards EN ISO 12944-4 and ISO 8501-2.</p>
<b>Application method</b>	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 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 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. 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 shall be above -10°C, of the paint should be over +15°C and the relative air humidity below 95%. 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.

<b>Drying time</b>	+23 °C / 50% RH (dry film 100 μm)				
- dust free	after 2 h				
- touch dry	after 6 h				
- fully cured	after 2 days				
<b>Overcoatable</b>	<b>Surface temperature</b>	<b>By itself</b>		<b>By topcoats</b>	
		Min.	Max.	Min.	Max.
	-5 °C	24 h	1 month*	24 h	1 month
	0 °C	14 h	1 month*	14 h	1 month
	+5 °C	9 h	1 month*	9 h	1 month
	+10 °C	6 h	1 month*	6 h	1 month
	+20 °C	5 h	1 month*	5 h	1 month

\*unlimited in internal conditions. Given indications relate to the recommended coating thickness, drying in good ventilation conditions. Overcoating times ability 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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