

# EPIRUST 2012

## Epoxy primer

Modified epoxy primer, fast curing with amine adduct, two component, cured in low temperatures (from -10°C).

For priming of steel constructions, thermally sprayed steel and aluminium operating in sea, coastal and industrial environment.

Can be applied on wet and not well cleaned surfaces. The coating cures very fast even in low temperatures. Flexible coating, with good adhesion to surfaces and resistant to mechanical factors. The coating resistant to weathering, water, salt and alkali solutions, oil, fuel oil, diesel, motor gasoline and some organic solvents.



## TECHNICAL DATA

<b>Fields of application</b>	Machinery, Steel constructions		
<b>Recommended substrate</b>	Aluminium, Steel		
<b>Binder</b>	Epoxy		
<b>Solids</b>	60±2% by volume (ISO 3233)		
<b>Total mass of solids</b>	Approx. 1100 g/l		
<b>Volatile organic compound (VOC)</b>	Approx. 330 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 (m²/l)</b>
	60	100	10.0
	100	166	6.0
	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.		
<b>Practical spreading rate</b>	The values depend on the application technique, surface conditions, overspray, etc.		
<b>Colours</b>	TO-250 red oxide, TO-840 silver grey, TO-810 light grey		
<b>Gloss (60°)</b>	Matt		
<b>Hardener</b>	Comp. B: UTWARDZACZ 061		
<b>Mixing ratio (A:B)</b>	100:20 parts by volume		
<b>Pot life, +23°C</b>	2 h		
<b>Thinner</b>	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 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-, dust- and poor attached rust-free cleaned to the degree of cleanliness according to PN-ISO 8501-1: at least St 3 for constructions used in industrial environment; St 2 for constructions used in atmospheric conditions and for internal surfaces. It is possible to use on wet surfaces.

**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 and 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 dry, tarnished with non-metallic abrasive, grease-, salt- and dust-free.

**THERMALLY SPRAYED ALUMINIUM SURFACES:** The surface to be treated must be dry, grease-, salt-, dust-free and without other contaminants, primed immediately with thin layer of diluted EPIRUST 2012, EPIRUST 2002, EPIRUST or shopprimer, before any condensation occurs.

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.

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 0.015 - 0.019".

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 50 and 150 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 is not recommended to apply EPIRUST 2012 on wet or covered with drops surfaces.

## Application conditions

During the application and drying period the temperature of the ambient air shall be above -10°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 of the paint should be over +15°C. Adequate ventilation during application and drying period is recommended. The coating can be applied on wet and cold surfaces (temperature below dew point). The wet surfaces means: surfaces after hydroblasting or cold surfaces with temperature below dew point, without water observed.

Drying time

+23 °C / 50% RH (dry film 60 µm)

- dust free

after 40 min

- touch dry

after 2 h

- fully cured

after 2 days

Overcoatable

Surface temperature	By itself		By topcoats	
	Min.	Max.	Min.	Max.
-10 °C	18 h	unlimited	18 h	36 days
-5 °C	12 h	unlimited	12 h	18 days
0 °C	6 h	unlimited	6 h	10 days
+5 °C	4 h	unlimited	4 h	6 days
+10 °C	3 h	unlimited	3 h	3 days
+20 °C	2 h	unlimited	2 h	2 days
+30 °C	1 h	unlimited	1 h	16 h

Due to higher sensitivity of topcoats to surface cleanness, overcoating time should be short, preferably as short as full cure coating time in related temperature. To obtain good intercoat adhesion surface cleanest is needed. It is important in case of long overcoating intervals. When the coating was applied in unfavorable conditions (high humidity, insufficient ventilation) it is recommended to wash primer surface down with water and dry. 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** TEKNO SOLV 9506

## HEALTH AND SAFETY

**Safety and precaution measures** See safety data sheet.

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