

EPIRUST 2002

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, aluminium or galvanized operating in sea, coastal and industrial environment. For priming steel and cast iron constructions operating in immersion.

Can be applied on wet and not well cleaned surfaces. The coating cures very fast even in low temperatures. The paint is not moisture sensitive during curing. The coating is not sensitive to water (rain) when cured to touch dry degree. 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. The coating is resistant to elements occurring in the cathodic protection.



TECHNICAL DATA

Fields of application	Machinery, Steel constructions, Submerged constructions		
Recommended substrate	Steel, Zinc, Aluminium		
Binder	Epoxy		
Solids	56±2% by volume (ISO 3233)		
Total mass of solids	Approx. 1050 g/l		
Volatile organic compound (VOC)	Approx. 350 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	Dry film (µm)	Wet film (µm)	Theoretical spreading rate (m²/l)
	40	71	14.0
	60	110	9.3
	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.		
Practical spreading rate	The values depend on the application technique, surface conditions, overspray, etc.		
Colours	TO-250 red oxide, TO-840 silver grey		
Gloss (60°)	Matt		
Hardener	Comp. B: UTWARDZACZ 061		

Mixing ratio (A:B)	100:22 parts by volume
Pot life, +23 °C	6 h
Thinner	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: cleaned to the degree of cleanliness according to ISO 8501-1: at least Sa 2 for constructions operating in immersion and in aggressive environment, when long term protection is needed; at least St 3 for constructions used in industrial environment; at least St 2 for constructions used in atmospheric conditions and for internal surfaces. Dry, salt-, grease-, dust- and poor attached rust-free surface. It is possible to use on wet surfaces.

STEEL SURFACES PREVIOUSLY PRIMED USING SHOPPRIMER: dry and free of contamination. Rust, mechanical, thermal damage or any defects of surface should be cleaned to at least Sa 2 according to ISO 8501-1 for immersion and St 3 for surfaces in atmospheric conditions. For internal surfaces St 2 is acceptable. Shopprimed coating without visible defects, roughened mechanically.

NO STABILIZED HOT DIP GALVANIZED STEEL SURFACES AND DRY ALUMINUM SURFACES: should be tarnish with non-metallic abrasive. All contamination e.g. oil, grease, fluxing agent, etc. should be removed. Galvanized surface should be contaminant-free.

STABILIZED HOT DIP GALVANIZED STEEL SURFACES: should be zinc corrosion products free (white rust free) and any contaminant-free. For cleaning hot water, water under pressure, steam, abrasives or manual mechanic tool cleaning can be used. The surface for painting should be dry, dust-, grease- and salt-free.

THERMALLY SPRAYED GALVANIZED AND ALUMINUM SURFACES: should be dry and primed immediately with thin layer of diluted EPIRUST 2002 or EPIRUST, before any condensation occurs. The surface for painting should be dry, dust-, grease- and salt-free.

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 painting on wet or corroded surfaces it is recommended to apply first layer by brush.

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 35 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. 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 2002 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 , of the paint should be over $+15^{\circ}\text{C}$ and the relative air humidity below 95%. The minimum temperature of the surface shall be above -5°C (frost- and ice-free surface). 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. Adequate ventilation during application and drying period is recommended.

Drying time	+23 °C / 50% RH (dry film 60 µm)			
- dust free	after 15 min			
- touch dry	after 50 min			
- fully cured	after 38 h			
Overcoatable	Surface temperature	By itself		By vinyl, acrylic or polyurethane topcoats
		Min.	Max.	Min. Max.
	-10 °C	15 h	unlimited	20 h 26 days
	-5 °C	9 h	unlimited	10 h 12 days
	0 °C	5 h	unlimited	6 h 7 days
	+5 °C	3 h	unlimited	4 h 3 days
	+10 °C	1 h	unlimited	2 h 2 days
	+20 °C	40 min	unlimited	1 h 24 h
	+30 °C	35 min	unlimited	50 min 6 h
	<p>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.</p> <p>Overcoating times may be different with a change of temperature, ventilation, number of layers and the thickness of the coating.</p>			

Cleaning TEKNOSOLV 9506

HEALTH AND SAFETY

Safety and precaution measures See safety data sheet.

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