

Technical Data Sheet EP PRIMER 310

Epoxy Primer 2K

RELATED PRODUCTS

EP HARD THIN 60 Hardener for epoxy primer Epoxy thinner

USE

 Epoxy Primer 2K is intended for coating steel, aluminium and galvanized steel in outdoor and indoor use.

PROPERTIES

- Perfect insulation properties
- Possibility of the application up to 300 μm wet in a single layer
 - · Application of thick layers is possible
 - Perfect hiding power and flowability
 - Very good chemical resistance
 - Very good mechanical resistance



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SUBSTRATES					
Steel and cast iron	milling scale, loose rust a	The steel/cast iron substrate shall be dry and free of oils, grease, dust, loose old coatings, milling scale, loose rust and foreign bodies. The surface shall exhibit bare metallic gloss. Mat smooth and shining metallic surfaces with P120 sand paper to produce sufficient substrate roughness.			
Galvanized steel	Cure the galvanized substrates minimum 4 months prior to application. Degrease and gentl mat with an abrasive finishing pad to produce a porous texture. Degrease again.				
Aluminium	Degrease, mat with P240	Degrease, mat with P240 to P320 sand paper and degrease again.			
Old coatings	Test coat a small area of	Mat and degrease. f the coating adheres poorly, remove it completely. Test coat a small area of the old coating. If the dry coat finish is unsatisfactory, remove the old coating completely and pretreat the substrate as instructed above.			
Polyester laminates	Dry sand P280, degrease	Dry sand P280, degrease again.			
Note: Dry sanding genera	ates dust. Proper respiratory prote	ection is recommended.			
MIXING RATIO					
	Coating method	Product	Volume ratio	Weight ratio	
	Rollers or brushes	EP PRIMER 310	4	100	
		EP HARD	1	15	
		Epoxy thinner THIN 60	0 ÷ 5 %	0 ÷ 4	
		EP PRIMER 310	4	100	
	Pneumatic spraying	EP HARD	1	15	
		Epoxy thinner THIN 60	20 %	16	
		EP PRIMER 310	4	100	
	Airless spraying	EP HARD	1	15	
		Epoxy thinner THIN 60	10 %	8	
VISCOSITY					
	DIN 4/20°C				
	Pneumatic spraying	20 ÷ 30 s			
P	Airless spraying	45 ÷ 55 s			
VOC CONTENT					
VOC II/P/o limit*		540 g/l			
VOC II/B/c limit* Actual VOC content		380 g/l (for 4+1)			
Actual VOC content		470 g/l (for 4+1+20%)			
* For ready to a	apply mixture acc. to EU Directive	2004/42/EC			



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APPLICATION CONDITIONS

- The substrate shall be dry.
 Min. product temperature: +10°C.
 The coat, coated surface and ambient temperatures must be between +5°C and +30°C.
- The relative humidity must not exceed 80%.
 Do not coat at high humidity (e.g. when rain, snow or fog is forecasted), on hot afternoons and/or in strong wind.

The application conditions determine the product layer drying time and the developed coating properties. The substrate temperature shall be 3°C higher than the ambient dew point or more.

APPLICATION

		Nozzle	Pressure	Distance
*	Pneumatic spraying	1.6 - 2.0 mm	3 - 4 bar	15 - 20 cm
CAUTION: Follow the equipment manufacturer's guidelines	Airless spraying in air jacket	0.33 - 0.38 mm (0.013" - 0.015 ")	100 - 140 bar Air jacket 2 bar	10 - 15 cm
	Brush	Natural bristle brushes or natural and synthetic bristle brushes are recommended.		
	Roller	Velour and mohair rollers are recommended.		

The spray application parameters depend on the individual performance and requirements of the tool and must be tested prior to coating.

Caution!

Verify that all corners and edges have been properly coated.

Depending on the roller type, the coating may contain air bubbles which burst and form craters during drying.

	Recommended number of layers	1 - 2			
	CAUTION: The minimum epoxy primer thickness is 80 µm on steel substrates.				
	Overall wet layer thickness	130 - 180 μm			
	Overall dry layer thickness	80 - 100 μm			
	The yield of the ready to use mixture for the given range of dry layer thickness	7.5 m²/l at 80 μm			
(1/1/	Flash-off time between layers	10 ÷15 min			
TECHNICAL DATA					
Solids content by weight EP PRIMER 310 + EP HARD; 4+1		76 - 78%			
Solids content by volume EP PRIMER 310 + EP HARD; 4+1		59 - 63%			
Density EP PRIMER 310 + EP HARD; 4+1		1.51 - 1.55 g/cm ³			



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Mixture life at 20°C	2 hours				
Adhesion, PN-EN ISO 2409	0 – 1				
Flexibility, PN-EN ISO 1519	min. 10				
Impact strength, PN-EN ISO 6272-1	min. 40				
Corrosion resistance, salt spray test, PN-EN ISO 9227	Excellent anti-corrosion properties				
Chemical resistance	intermittent (splashes and sprays)				
CURING TIME					
Time to sand.	20°C	60°C			
For the max. dry coating thickness of 130 $\mu \text{m}.$	24 hours	45 min.			
CAUTION: The drying time may vary with temperature and/or humidity.					
EQUIPMENT CLEANING					
Epoxy thinner THIN 60					
STORAGE CONDITIONS					
Store in a dry and cool room, away from sources of fire and heat at 5°C-25°C. Avoid exposure to sunlight.					
SHELF LIFE					
EP PRIMER 310	24 months/20°C				
EP HARD	24 months/20°C				
THIN 60	24 months/20°C				
SAFETY					
See the Safety Data Sheet.					
OTHER INFORMATION					

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Registration number: 000024104.

The effectiveness of our systems results from laboratory research and many years of experience. The data contained here in meets the current knowledge about our products and their application potential. We ensure high quality, provided the user follows the instructions and the work is performed in accordance with good workmanship. It is necessary to perform a test application on the product due to its potentially different reaction with different materials. We may not be held liable for defects if the final result was affected by factors beyond our control.