



FREOPOX-Hydro-Grundierung

WE1414M/HE0177

Characteristics	<ul style="list-style-type: none"> ■ Water-thinnable 2C coating ■ Application, e.g. in the vehicle construction sector ■ Fast initial drying ■ Good corrosion protection ■ Good stability ■ Good grindability 																																		
Technical / Physical Data	<table border="1"> <tr> <td>■ Binder-Base</td> <td>Epoxy resin crosslinked with polyamine</td> </tr> <tr> <td>■ Colour</td> <td>All common colour shades</td> </tr> <tr> <td>■ Gloss value DIN EN ISO 2813</td> <td>mat 5-15 Angle 85°</td> </tr> <tr> <td>■ Viscosity</td> <td>2500-3500 mPa.s/ Spindle 5 60 revolution/ min.</td> </tr> <tr> <td>■ Hardener</td> <td>HE0177 See technical data sheet</td> </tr> <tr> <td>■ Mixing ratio</td> <td>Parts by weight 5,5:1</td> </tr> <tr> <td>■ Mixing ratio</td> <td>Parts by volume 4,0:1</td> </tr> <tr> <td>■ Thinner</td> <td>demineralised water</td> </tr> <tr> <td>■ pH-Value</td> <td>8-9</td> </tr> <tr> <td>■ Density calculated</td> <td>1,25-1,45 g/ml</td> </tr> <tr> <td>■ Density calculated</td> <td>1,25-1,35 g/ml after adding hardener</td> </tr> <tr> <td>■ Solid Mass calculated</td> <td>56-60 %</td> </tr> <tr> <td>■ Solid Mass calculated</td> <td>52-56 % after adding hardener</td> </tr> <tr> <td>■ Solid content in volume calculated</td> <td>300-340 ml/kg</td> </tr> <tr> <td>■ Solid content in volume calculated</td> <td>310-330 ml/kg after adding hardener</td> </tr> <tr> <td>■ Material usage theoretical, without application loss</td> <td>200-210 g/m², Layer thickness 60 µm after adding hardener</td> </tr> <tr> <td>■ Reference colour of the specified values</td> <td>Colour of WE1414MW1721</td> </tr> </table>	■ Binder-Base	Epoxy resin crosslinked with polyamine	■ Colour	All common colour shades	■ Gloss value DIN EN ISO 2813	mat 5-15 Angle 85°	■ Viscosity	2500-3500 mPa.s/ Spindle 5 60 revolution/ min.	■ Hardener	HE0177 See technical data sheet	■ Mixing ratio	Parts by weight 5,5:1	■ Mixing ratio	Parts by volume 4,0:1	■ Thinner	demineralised water	■ pH-Value	8-9	■ Density calculated	1,25-1,45 g/ml	■ Density calculated	1,25-1,35 g/ml after adding hardener	■ Solid Mass calculated	56-60 %	■ Solid Mass calculated	52-56 % after adding hardener	■ Solid content in volume calculated	300-340 ml/kg	■ Solid content in volume calculated	310-330 ml/kg after adding hardener	■ Material usage theoretical, without application loss	200-210 g/m ² , Layer thickness 60 µm after adding hardener	■ Reference colour of the specified values	Colour of WE1414MW1721
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Substrate	<ul style="list-style-type: none"> ■ Steel ■ Non-ferrous metals 																																		
Pretreatment	<ul style="list-style-type: none"> ■ The substrate must be free of adhesion-impairing substances such as oil, grease, rust, scale, rolling skin, wax and separating agent residue. Preliminary tests are recommended for assuring the suitability of coating qualities on the substrate. For more stringent requirements, we recommend: 																																		

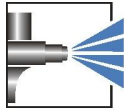
Our technical data sheets are to provide you with advice based on our latest state of knowledge. This guidance does not release you from your own obligation to test our products for their suitability for your intended purposes and applications. The sale of our products is in accordance with our terms of business and delivery.



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	for corrosion protection - e.g. phosphating for adhesion - e.g. blasting, pickling, sanding	
Structure recommendation	■ Substrate	on blasted steel plate
	■ Primer	WE1414MW1721 Mixing ratio 5,5:1/ HE0177 Dry film thickness 60 µm
	■ Top coat	WU1451GRA300 Mixing ratio 5:1/ HU0150 Dry film thickness 40 µm
Mechanical Test	■ Cross-cut-test DIN EN ISO 2409	Gt 0
Resistance Test	■ Condensate constant climate DIN EN ISO 6270-2 (CH)	120 hours Degree of blistering 0 (S 0) DIN EN ISO 4628-2
	■ Salt spray test (NSS) DIN EN ISO 9227	504 hours Water ingress Wb < 2,5 mm DIN EN ISO 4628-8
	■ Chemical resistance	Needs to be checked. The temperature and concentration of chemicals have a major influence on the test outcome.
Processing and application	■ Prior to use, stir well or mix components homogeneously (e.g. with fast mixer). To prevent skin formation, over-coat with water. Dry film thickness must not exceed 250 µm - risk of reaction bubbles.	
	■ Object temperature	10-30 °C
	■ Processing conditions	Room temperature 18-25 °C Relative humidity 40-60 %
	■ Processing time	max. 2 hrs./ 20 °C End of the processing time cannot be detected from gelling. The processing time can decrease at higher temperatures and/or under pressure.
	■ Airless spraying	130-150 Sec./ 6 mm Viscosity cup (DIN 53211) Nozzle: 0,33 mm Angle 40° Material pressure 120 bar
	■ Airmix spraying	130-150 Sec./ 6 mm Viscosity cup (DIN 53211) Nozzle 0,33 mm Angle 40° Material pressure 100 bar Atomiser pressure 2
	■ High pressure spraying	40-80 Sec./ 4 mm Viscosity cup (DIN 53211) Nozzle 1,8 mm Spray pressure 3 bar
	■ Rolling / painting	as delivered viscosity
	■ Over-coating capability	possible with same quality, dry at the earliest after matting
■ Cleaning of equipment	Immediately with water - possibly with addition of 5-10 % by weight EFD cleaning agent 400916. Dried-on equipment with org. solvents,	

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	e.g. EFD thinner 400424.
	<ul style="list-style-type: none"> Health & Safety at Work guidelines The standard personal safety precautions must be observed when handling painting materials. Detailed information about dangerous substances, safety data and recommendations concerning Health & Safety at Work and environmental protection can be found in the corresponding safety data sheet.
Curing	<ul style="list-style-type: none"> Air drying at 20°C/ 50% relative humidity with air movement Dust drying after 15 min. (degree of drying 1/ DIN EN ISO 9117-5) Dry to the touch after 3 hrs. (degree of drying 4/ DIN EN ISO 9117-5) Full drying after 18 days (pendulum damping/DIN EN ISO 1522) Intermediate drying 60 min./ 40 °C
Resistance to storage	<ul style="list-style-type: none"> Approx. 12 month in original packagings at an ambient temperature of 5 to 25 °C. Protect from frost. Open packages are to be used within a short time. <p>The minimum storage stability of each batch is stated on the product label. The material does not necessarily become unusable if stored for longer than this period. However, for quality assurance purposes, an inspection of these materials is essential to ensure that they are still suitable for the intended application.</p>
Specific comments	<ul style="list-style-type: none"> EFD-info Refer to the EFD information for further technical information. Nr. 111 + 510 Test conditions All information is based on a standard climate 23/50 DIN EN 23270. All information is based on our product knowledge and experience. We have no direct influence on the application itself. Please do not hesitate to contact us for further information. <p>The information provided here contains reference values and does not constitute a specification.</p>