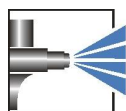


EFDEDUR-Hydro-Grundierung

WU1990M/HU0448

Characteristics	<ul style="list-style-type: none"> ■ Water-thinnable 2C coating ■ Application, e.g. in the vehicle construction sector ■ Fast initial drying ■ Good adhesion to steel and non-ferrous metals ■ Forced drying possible ■ Suitable for mineral substrates ■ For exterior use 																																
Technical / Physical Data	<table> <tr> <td>■ Binder-Base</td><td>Acrylate resin crosslinked with polyisocyanate</td></tr> <tr> <td>■ Colour</td><td>All common colour shades</td></tr> <tr> <td>■ Gloss value visual</td><td>mat</td></tr> <tr> <td>■ Viscosity DIN 53211 (formerly)</td><td>Flow time 40-60 seconds 4 mm viscosity cup</td></tr> <tr> <td>■ Hardener</td><td>HU0448 See technical data sheet</td></tr> <tr> <td>■ Mixing ratio</td><td>Parts by weight 5 : 1</td></tr> <tr> <td>■ Mixing ratio</td><td>Parts by volume 4 : 1</td></tr> <tr> <td>■ Thinner</td><td>demineralised water</td></tr> <tr> <td>■ Density calculated</td><td>1,18-1,38 g/ml</td></tr> <tr> <td>■ Density calculated</td><td>1,11-1,31 g/ml after adding hardener</td></tr> <tr> <td>■ Solid Mass calculated</td><td>50-54 %</td></tr> <tr> <td>■ Solid Mass calculated</td><td>51-55 % after adding hardener</td></tr> <tr> <td>■ Solid content in volume calculated</td><td>283-323 ml/kg</td></tr> <tr> <td>■ Solid content in volume calculated</td><td>336-356 ml/kg after adding hardener</td></tr> <tr> <td>■ Material usage theoretical, without application loss</td><td>163-183 g/m², Layer thickness 60 µm</td></tr> <tr> <td>■ Reference colour of the specified values</td><td>Colour of WU1990MRU102</td></tr> </table>	■ Binder-Base	Acrylate resin crosslinked with polyisocyanate	■ Colour	All common colour shades	■ Gloss value visual	mat	■ Viscosity DIN 53211 (formerly)	Flow time 40-60 seconds 4 mm viscosity cup	■ Hardener	HU0448 See technical data sheet	■ Mixing ratio	Parts by weight 5 : 1	■ Mixing ratio	Parts by volume 4 : 1	■ Thinner	demineralised water	■ Density calculated	1,18-1,38 g/ml	■ Density calculated	1,11-1,31 g/ml after adding hardener	■ Solid Mass calculated	50-54 %	■ Solid Mass calculated	51-55 % after adding hardener	■ Solid content in volume calculated	283-323 ml/kg	■ Solid content in volume calculated	336-356 ml/kg after adding hardener	■ Material usage theoretical, without application loss	163-183 g/m ² , Layer thickness 60 µm	■ Reference colour of the specified values	Colour of WU1990MRU102
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Substrate	<ul style="list-style-type: none"> ■ mineral ■ Primer 																																
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: 																																

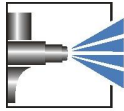
Our technical data sheets are to provide you with advice based on our latest state of knowledge. This guidance does not release you from your own obligation to test our products for their suitability for your intended purposes and applications. The sale of our products is in accordance with our terms 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 mineral substrate
	■ Primer	WU1990MRU102 Mixing ratio 5:1/ HU448 Dry film thickness 60 µm
	■ Top coat	WU1451RT2077 Mixing ratio 4:1/ HU0448 Dry film thickness 50 µm
Mechanical Test	■ Cross-cut-test DIN EN ISO 2409	Gt 0
	■ Temperature resistance	Short time loading 70°C
	■ 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 100 µm - risk of reaction bubbles.
	■ Object temperature	10-30 °C
	■ Processing conditions	Room temperature 18-22 °C Relative humidity 40-60 %
	■ Processing time	max. 6 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.
	■ Airmix spraying	80-120 Sec./ 4 mm Viscosity cup (DIN 53211) Nozzle 0,33 mm Angle 30° Material pressure 80 bar Atomiser pressure 3
	■ High pressure spraying	80-120 Sec./ 4 mm Viscosity cup (DIN 53211) Nozzle 1,7 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, e.g. EFD thinner 400424. Do not mix curing agent with water! The cleaning must be carried out with organic solvents.
	■ 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.



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Curing	■ Air drying	at 20°C, 50% relative humidity with air movement
	■ Dust drying	after 20 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 8 days (pendulum damping/DIN EN ISO 1522)
	■ Oven drying	possible to 80°C
Resistance to storage	■ 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.	
	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.	
Specific comments	■ 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. The information provided here contains reference values and does not constitute a specification.	