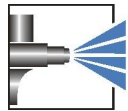


# EFDEDUR-Hydro-Lackfarbe

## WU1448M/HU0448

|   |   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
|---|---|---------------|--|------------|--|----------------------------------|------------------------------|-------------------------------------|---|------------|------------------------------------|----------------|---------------------|----------------|---------------------|-----------|---------------------|------------|---------|-------------------------|----------------|-------------------------|---|----------------------------|---------|----------------------------|----------------------------------|---|---------------|---|--|---|---|---|------------------------|
| <b>Characteristics</b>                                    | <ul style="list-style-type: none"> <li>■ Water-thinnable 2C coating</li> <li>■ Application, e.g. in the vehicle construction sector</li> <li>■ Fast initial drying</li> <li>■ Good light and weather resistance</li> </ul>  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| <b>Technical / Physical Data</b>                          | <table border="1"> <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<br/>DIN EN ISO 2813</td> <td>satin mat<br/>35-45 Angle 85°</td> </tr> <tr> <td>■ Viscosity<br/>DIN 53211 (formerly)</td> <td>Flow time 35-45 seconds<br/>4 mm viscosity cup</td> </tr> <tr> <td>■ Hardener</td> <td>HU0448<br/>See technical data sheet</td> </tr> <tr> <td>■ Mixing ratio</td> <td>Parts by weight 6:1</td> </tr> <tr> <td>■ Mixing ratio</td> <td>Parts by volume 5:1</td> </tr> <tr> <td>■ Thinner</td> <td>demineralised water</td> </tr> <tr> <td>■ pH-Value</td> <td>8,0-8,8</td> </tr> <tr> <td>■ Density<br/>calculated</td> <td>1,20-1,24 g/ml</td> </tr> <tr> <td>■ Density<br/>calculated</td> <td>1,15-1,20 g/ml<br/>after adding hardener</td> </tr> <tr> <td>■ Solid Mass<br/>calculated</td> <td>45-48 %</td> </tr> <tr> <td>■ Solid Mass<br/>calculated</td> <td>47-50 %<br/>after adding hardener</td> </tr> <tr> <td>■ Solid content in volume<br/>calculated</td> <td>310-350 ml/kg</td> </tr> <tr> <td>■ Solid content in volume<br/>calculated</td> <td>300-340 ml/kg<br/>after adding hardener</td> </tr> <tr> <td>■ Material usage<br/>theoretical, without application loss</td> <td>120-130 g/m<sup>2</sup>, Layer thickness 40 µm<br/>after adding hardener</td> </tr> <tr> <td>■ Reference colour of the<br/>specified values</td> <td>Colour of WU1448MRA905</td> </tr> </table> | ■ Binder-Base | Acrylate resin crosslinked with polyisocyanate | ■ Colour   | All common colour shades                 | ■ Gloss value<br>DIN EN ISO 2813 | satin mat<br>35-45 Angle 85° | ■ Viscosity<br>DIN 53211 (formerly) | Flow time 35-45 seconds<br>4 mm viscosity cup | ■ Hardener | HU0448<br>See technical data sheet | ■ Mixing ratio | Parts by weight 6:1 | ■ Mixing ratio | Parts by volume 5:1 | ■ Thinner | demineralised water | ■ pH-Value | 8,0-8,8 | ■ Density<br>calculated | 1,20-1,24 g/ml | ■ Density<br>calculated | 1,15-1,20 g/ml<br>after adding hardener | ■ Solid Mass<br>calculated | 45-48 % | ■ Solid Mass<br>calculated | 47-50 %<br>after adding hardener | ■ Solid content in volume<br>calculated | 310-350 ml/kg | ■ Solid content in volume<br>calculated | 300-340 ml/kg<br>after adding hardener | ■ Material usage<br>theoretical, without application loss | 120-130 g/m <sup>2</sup> , Layer thickness 40 µm<br>after adding hardener | ■ Reference colour of the<br>specified values | Colour of WU1448MRA905 |
| ■ Binder-Base   | Acrylate resin crosslinked with polyisocyanate  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Colour  | All common colour shades  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Gloss value<br>DIN EN ISO 2813                          | satin mat<br>35-45 Angle 85°  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Viscosity<br>DIN 53211 (formerly)                       | Flow time 35-45 seconds<br>4 mm viscosity cup   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Hardener  | HU0448<br>See technical data sheet  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Mixing ratio  | Parts by weight 6:1   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Mixing ratio  | Parts by volume 5:1   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Thinner   | demineralised water   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ pH-Value  | 8,0-8,8   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Density<br>calculated                                   | 1,20-1,24 g/ml  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Density<br>calculated                                   | 1,15-1,20 g/ml<br>after adding hardener   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Solid Mass<br>calculated                                | 45-48 %   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Solid Mass<br>calculated                                | 47-50 %<br>after adding hardener  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Solid content in volume<br>calculated                   | 310-350 ml/kg   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Solid content in volume<br>calculated                   | 300-340 ml/kg<br>after adding hardener  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Material usage<br>theoretical, without application loss | 120-130 g/m <sup>2</sup> , Layer thickness 40 µm<br>after adding hardener   |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Reference colour of the<br>specified values             | Colour of WU1448MRA905  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| <b>Substrate</b>  | <ul style="list-style-type: none"> <li>■ Steel, passivated or pretreated substrates</li> <li>■ Primer</li> </ul>  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| <b>Pretreatment</b>                                       | <ul style="list-style-type: none"> <li>■ The substrate must be free of adhesion-impairing substances such as oil, grease, wax and separating agent residue. Preliminary tests are recommended for assuring the suitability of coating qualities on the substrate.</li> </ul>  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| <b>Structure recommendation</b>                           | <table border="1"> <tr> <td>■ Substrate</td> <td>KTL-primed</td> </tr> <tr> <td>■ Top coat</td> <td>WU1448MRA905<br/>Mixing ratio 6:1/ HU0448</td> </tr> </table>   | ■ Substrate   | KTL-primed                                     | ■ Top coat | WU1448MRA905<br>Mixing ratio 6:1/ HU0448 |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Substrate   | KTL-primed  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |
| ■ Top coat  | WU1448MRA905<br>Mixing ratio 6:1/ HU0448  |               |  |            |  |                                  |                              |                                     |   |            |                                    |                |                     |                |                     |           |                     |            |         |                         |                |                         |   |                            |         |                            |                                  |   |               |   |  |   |   |   |                        |

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.

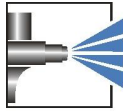


# EFDEDUR-Hydro-Lackfarbe

## WU1448M/HU0448

|                                   |  |   |
|-----------------------------------|--|---|
|                                   |  | Dry film thickness 40 µm  |
| <b>Mechanical Test</b>            | ■ Cross-cut-test<br>DIN EN ISO 2409  | Gt 0  |
| <b>Resistance Test</b>            | ■ Condensate constant climate<br>DIN EN ISO 6270-2 (CH)  | 240 hours<br>Degree of blistering 0 (S 0)<br>DIN EN ISO 4628-2  |
|                                   | ■ Salt spray test (NSS)<br>DIN EN ISO 9227   | 480 hours<br>Water ingress Wb < 2 mm<br>DIN EN ISO 4628-8   |
|                                   | ■ Temperature resistance   | Short time loading 120°C  |
|                                   | ■ Chemical resistance  | Needs to be checked.<br>The temperature and concentration of chemicals have a major influence on the test outcome.  |
| <b>Processing and application</b> | ■ Prior to use, stir well or mix components homogeneously (e.g. with fast mixer). To prevent skin formation, over-coat with water.<br>Dry film thickness must not exceed 70 µm - risk of reaction bubbles. |   |
|                                   | ■ Object temperature   | 10-30 °C  |
|                                   | ■ Processing conditions  | Room temperature 18-22 °C<br>Relative humidity 40-60 %  |
|                                   | ■ Processing time  | max. 4 hrs./ 20 °C<br>End of the processing time cannot be detected from gelling.<br>The processing time can decrease at higher temperatures and/or under pressure.   |
|                                   | ■ Airmix spraying  | 30-40 Sec./ 4 mm Viscosity cup (DIN 53211)<br>Nozzle 0,23 mm Angle 30°<br>Material pressure 80 bar<br>Atomiser pressure 2-4   |
|                                   | ■ High pressure spraying   | 30-40 Sec./ 4 mm Viscosity cup (DIN 53211)<br>Nozzle 1,5 mm<br>Spray pressure 3 bar   |
|                                   | ■ Rolling / painting   | as delivered viscosity  |
|                                   | ■ Over-coating capability  | possible with same quality,<br>dry at the earliest after matting  |
|                                   | ■ Cleaning of equipment  | Immediately with water - possibly with addition of 5-10 % by weight EFD cleaning agent 400916.<br>Dried-on equipment with org. solvents, e.g. EFD thinner 400424. Do not mix curing agent with water!<br>The cleaning must be carried out with organic solvents.                                  |
|                                   | ■ <b>Health &amp; Safety at Work guidelines</b>  | 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. |
| <b>Curing</b>                     | ■ Air drying   | at 20°C, 50% relative humidity with air movement  |

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**EFDEDUR-Hydro-Lackfarbe**  
WU1448M/HU0448

|                              |   |
|------------------------------|---|
|                              | <ul style="list-style-type: none"> <li>■ Dust drying after 30 min.<br/>(degree of drying 1/ DIN EN ISO 9117-5)</li> <li>■ Dry to the touch after 8 hrs.<br/>(degree of drying 4/ DIN EN ISO 9117-5)</li> <li>■ Full drying after 8 days<br/>(pendulum damping/DIN EN ISO 1522)</li> <li>■ Oven drying possible to 80°C</li> </ul>   |
| <b>Resistance to storage</b> | <ul style="list-style-type: none"> <li>■ 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.</li> </ul> <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>                    |
| <b>Specific comments</b>     | <ul style="list-style-type: none"> <li>■ <b>EFD-info</b><br/>Refer to the EFD information for further technical information.<br/>Nr. 111 + 510</li> <li>■ <b>Test conditions</b><br/>All information is based on a standard climate 23/50 DIN EN 23270.<br/>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.</li> </ul> <p>The information provided here contains reference values and does not constitute a specification.</p> |