

# EFDEDUR

## Primer UR1989M

- 2-component-polyurethane-primer with solvent
- For plastic shaped parts
- Very good adhesion on PS /ABS

<b>Technical physical data</b>	<b>Resin/ binder</b>	acrylic resin to be hardened with isocyanate	
	<b>Colour</b>	acc. to RAL 840 HR other colour shades on request	
	<b>Gloss value</b> visual	mat	
	<b>Original viscosity</b> DIN 53211* without hardener	95 to 105 Sek. / 4 mm cup	
	<b>Mixing ratio</b> by weight	10 : 1	
	<b>Mixing ratio</b> by volumen	7,3 : 1	
	<b>Hardener</b> base	EFDEDUR-Hardener HU0001 polyisocyanate	
	<b>Potlife</b> after hardener addition	max. 4 h / 20°C	
	<b>Thinner</b>	EFD-Thinner 400420 EFD-Thinner 400179	
	<b>Density</b> after hardener addition calculated	1,33 / ml + / - 0,1	
	<b>Solid content</b> after hardener addition calculated	61,5 % + / - 2	
	<b>Solid content in volume</b> after hardener addition calculated	315 ml / kg + / - 10	
	<b>Consumption</b> calculated after hardener addition in original viscosity, without application loss	125 to 135 g / m <sup>2</sup> dry film thickness 40 µm see „Special remarks“	
	<b>Spreading rate</b> calculated after hardener addition, in original viscosity, without application loss	7,5, to 8,0 m <sup>2</sup> / kg dry film thickness 40 µm see „Special remarks“	

<b>Storability</b>	Approx. 24 month in original packings at an ambient temperature of 5 to 25 °C, in case the original packings are tightly closed. Opened packing must be used very shortly. The minimum storage stability of each batch is mentioned on the product label. A storage time beyond the mentioned date doesn't necessarily mean that the material is unusable. In this case a check of the qualities which are important for the respective																		
<b>Processing and application</b>	<p><b>Application</b> Components are to be mixed homogeneously (e.g. with high-speed mixer).</p> <p>spraying-high pressure: after hardener addition and viscosity adjustment to 25 to 35 sec. / 4mm nozzle: 1,4 – 1,7 mm spraying pressure: 3 - 4 bar</p> <p><b>Substrates</b> plastic: Polystyrene (PS), Acrylonitrile / butadiene / styrene – copolymers (ABS)</p> <p><b>Pretreatment</b> The substrate must be free of materials which prevent adhesion, e.g. oil, grease, dust and surfactant</p> <p><b>Proposal for a coating system</b></p> <table border="0"> <tr> <td>substrate:</td> <td>plastic type: PS/ABS</td> <td></td> </tr> <tr> <td>primer:</td> <td>FREOPOX-Primer</td> <td>UR1989M</td> </tr> <tr> <td>top coat:</td> <td>EFDEDUR-Paint</td> <td>UR1044</td> </tr> </table> <p><b>Application temperature</b> oberhalb 10 °C</p> <p><b>Drying</b>                      air drying at 20°C</p> <table border="0"> <tr> <td>dust dry:</td> <td>after 30 min.</td> <td>(degree of drying 1/ DIN EN ISO 9117-5)</td> </tr> <tr> <td>dry to touch:</td> <td>after 2,5 h</td> <td>(degree of drying 4/ DIN EN ISO 9117-5)</td> </tr> <tr> <td>complete dry:</td> <td>after 10 days</td> <td>(swinging beam hardness/ DIN EN ISO 1522)</td> </tr> </table> <p>Ofentrocknung:      bis 50 °C möglich (Objekttemperatur)</p> <p><b>Cleaning of working equipment</b> EFD-Cleaner 400500</p> <p><b>Advise for safety protection and protection of health</b> The usual precautionary measures for ventilation as well as for personal protection are to be observed when handling painting materials. Detailed information about dangerous goods, safety data and recommendations concerning health protection and environment protection can be read in the corresponding safety data sheet.</p>	substrate:	plastic type: PS/ABS		primer:	FREOPOX-Primer	UR1989M	top coat:	EFDEDUR-Paint	UR1044	dust dry:	after 30 min.	(degree of drying 1/ DIN EN ISO 9117-5)	dry to touch:	after 2,5 h	(degree of drying 4/ DIN EN ISO 9117-5)	complete dry:	after 10 days	(swinging beam hardness/ DIN EN ISO 1522)
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<b>Special remarks</b>	<p><b>Information about Hardener and Thinner</b> The hardener and the thinner mentioned on page 1 are stated as standard components for this paint system. The standard hardener is also written in the order documents as well as on the label. Furthermore there are additional hardeners and thinners, which can be used as alternative in case the standard components doesn't meet the requirements. These products are tailor-made e.g. faster or slower hardening.</p>																		

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**Test condition**

\*Indication of the delivery viscosity according to DIN 53211:

DIN 53211 was withdrawn in October 1996.

On request the value is available according to DIN EN ISO 2431.

The statements concerning efficiency and drying depend on colour shade.

The values mentioned in this data sheet are based on UR189MRU910, white, mat and hardening with HU0001.

All information is based on a standard climate 20/65 DIN 50014.

For the calculation of the practical consumption loss additions have to be considered. Indications to this are the practical experience and advices given in DIN 53220.

All information are based on our product knowledge and experience. To the application we have no direct influence. For further information please don't hesitate to contact us.

The information mentioned herein are reference values and are not given as specification.