FreiLacke

Technical Data Sheet

EFDEDUR

HighSolid-Primer
UR1992M

- HighSolid primer with solvent
- Good adhesion on different undergrounds
- High sagging limit
- Good application characteristics
- For industrial goods and all kinds of construction machines

Technical physical data	**Resin/ binder**	polyacrylic resin to be hardened with isocyanate
	Colour	following to RAL 840 HR other colour shades on request
	Gloss value visual	tuff mat
	Original viscosity DIN 53211* without hardener	55 to 60 Sek. / 4 mm cup
	Mixing ratio by weight	10 : 1
	Mixing ratio by Volume parts	6,1 : 1
	Hardener base	EFDEDUR-Hardener HU0010 or EFDEDUR-Hardener HU0140 polyisocyanate
	Potlife after hardener addition	max. 2 h / 20°C
	Thinner	EFD-Thinner 400474
	Density after hardener addition calculated	1,64 / ml + / - 0,05
	Solid content after hardener addition calculated	76 % + / - 1
	Solid content in volume after hardener addition calculated	340 ml / kg + / - 5
	Consumption calculated after hardener addition in original viscosity, without application loss	220 to 240 g / m² dry film thickness 80 µm see „Special remarks“
	Spreading rate calculated after hardener addition, in original viscosity, without application loss	4,0, to 4,5 m² / kg dry film thickness 80 µm see „Special remarks“

DIN EN ISO 9001
ISO/TS 16949
EMAS

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Storability

Approx. 12 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

Processing and application

Application

Due to the low viskosity, the high solid content and the high density UR1992 tends to seddling. Before hardener addition UR1992 has to be stirred carefully with a high-speed mixer.

Components are to be mixed homogeneously (e.g. with high-speed mixer).

spraying-airmix:	in original viscosity after hardener addition nozzle: 0,33 mm or 0,13 inch geometry 40° spraying pressure: 80 to 120 bar
spraying-airless:	in original viscosity after hardener addition nozzle: 0,33 mm or 0,13 inch geometry 40° spraying pressure: 150 bar
spraying-high pressure:	after hardener addition and viscosity adjustment to 25 to 35 sec. nozzle: 1,8 mm spraying pressure: 4 bar

Substrates

shot blasted steel, steel, cast iron, stainless steel, galvanized steel, aluminium

Due to different kinds of aluminium and zinc coatings we recommend preliminary adhesion test

Pretreatment

The substrate must be free of materials which prevent adhesion, e.g. oil, grease, dust and surfactant. According to the requirements we recommend to apply the suited chemical (e.g. phosphatizing, chromating) or / and mechanical (e.g. shot blasting) pretreatment.

Proposal for a coating system

subtrate:	steel (e.g. Bonderite 1000)	
primer:	FREOPOX-HighSolid-Primer	UR1992M
top coat:	EFDEDUR-HighSolid-Coating	UR1991

Application temperature

required 18 to 24 °C

Drying air drying at 20°C

dust dry:	after 30 to 40 min.	(degree of drying 1/ DIN 53150)
dry to touch:	after 4,5 h	(degree of drying 4/ DIN 53150)
complete dry:	after 2 weeks	(swinging beam hardness/ ISO 1522)

Recoatability

With itself after previous cleaning, at any time possible

Cleaning of working equipment

EFD-Thinner 400500

Advise for safety protection and protection of health

The usual precautionery measures for ventilation as well as for personal protection are to be observed when handling painting materials. Detailled information about dangerous goods, sayfety data and recommendations concerning health protection and environment protection can be read in the corresponding safety data sheet.

Special remarks

Information about Hardener and Thinner
The hardener and the thinner mentioned on page 1 are stated as standard componentes 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.

Hardener are taking influence on the gloss (see page 1).

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, drying and caution labelling depend on colour shade. The values mentioned in this data sheet are based on UR1992MRU735, light grey and hardening with HU0010.

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.