FreiLacke

Technical Data Sheet

EFDEDUR

Paint
UR1044

- 2-component-polyurethane-finish paint with solvent
- In- and outdoor usage
- Very good light- and weather resistance
- For industrial goods, e.g. mechanical engineering
- Good working properties

Technical / Physical Data

Resin/ binder			polyacrylic resin to be hardened with isocyanate
Colour			acc. to RAL 840 HR other colour shades on request
Gloss value DIN 67530 and DIN EN ISO 2813	UR1044**G** UR1044**H** UR1044**Z**	= = =	glossy 70 to 80 geometry 20° satin glossy 40 to 60 geometry 60° acc. to customer´s requirement
Original viscosity DIN 53211* without hardener			70 to 80 Sek. / 4 mm cup
Mixing ratio by weight	UR1044**G** UR1044**H** UR1044**Z**	= = =	5 : 1 10 : 1 acc. to customer´s requirement
Hardener base			EFDEDUR-Hardener HU0400 polyisocyanate
Potlife after hardener addition			max. 4 h / 20°C
Thinner			EFD-Thinner 400320
Density after hardener addition calculated			1,4 g / ml + / - 0,1
Solid content after hardener addition calculated			68 % + / - 2
Solid content in volume after hardener addition calculated			345 ml / kg + / - 20
Consumption calculated after hardener addition in original viscosity, without application loss			140 to 150 g / m² dry film thickness 50 µm see „Special remarks“

Storability

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

DIN EN ISO 9001
ISO/TS 16949
EMAS

Emil Frei GmbH & Co.
Lackfabrik Döggingen
Am Bahnhof 6
D- 78195 Bräunlingen
Phone: +49 (0)7707 151-0
Fax: +49 (0)07707 151-238
info@freilacke.de,
www.freilacke.de

Processing and application

Application

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

spraying-airless:	in original viscosity after hardener addition nozzle: 0,011 inch geometry 40 spraying pressure: 120 bar
spraying-highpressure:	after hardener addition and viscosity adjustment to 20 to 25 sec. nozzle: 1,8 mm spraying pressure: 3 to 4 bar

Substrates

steel, non ferrous metals, plastic: e.g. PC, PMMA, ABS
Depending upon request: chemical or / and mechanical pretreatment and / or primer

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	
primer:	FREOPOX-Primer	ER1912
top coat:	EFDEDUR-Paint	UR1044

Application temperature

above 10 °C

Drying

air drying at 20°C

dust dry:	after 60 min.	(degree of drying 1/ DIN EN ISO 9117-5)
dry to touch:	after 4 h	(degree of drying 4/ DIN EN ISO 9117-5)
complete dry:	after 7 days	(swinging beam hardness/ DIN EN ISO 1522)
oven drying:	to 100°C possible	(object temperature)

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.

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 UR1044HRU910, white and hardening with HU0400.

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.