FreiLacke

Technical Data Sheet

EFDEDUR

UHS-Topcoat
UR1447N

- Ultra-High-Solid topcoat with solvent
- Good varnish spreading
- 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	acc. to RAL 840 GL
	Gloss value DIN 67530 and DIN EN ISO 2813	glossy >85 angle 60°
	Original viscosity without hardener	1200 bis 1900 mPa.s / Spindel 5
	Mixing ratio by weight	4 : 1
	Mixing ratio by Volume parts	2,7 : 1
	Hardener base	EFDEDUR-Hardener HU0400 polyisocyanate
	Potlife after hardener addition	max. 2 h / 20° Higher temperatures reduces the potlife
	Thinner	EFD-Thinner 400500
	Density after hardener addition calculated	1,36 / ml + / - 0,1
	Solid content after hardener addition calculated	75 % + / - 2
	Solid content in volume after hardener addition calculated	455 ml / kg + / - 10
	Consumption calculated, after hardener addition in original viscosity, without application loss	150 to 155 g / m² dry film thickness 70 µm see „Special remarks”
	Spreading rate calculated, after hardener addition, in original viscosity, without application loss	6 to 7 m² / kg dry film thickness 70 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

Components are to be mixed homogeneously (e.g. with high-speed mixer).
To reduce the thixothropie a machinal stirring (high speed mixer) is reconnended

spraying-airmix:	in original viscosity after hardener addition
spraying-high pressure:	in original viscosity after hardener addition
electrostatic spraying:	in original viscosity after hardener addition

Substrates

shot blasted steel, steel

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:	shot blasted steel	
primer:	EFDEDUR-UHS-Primer	UR1933HRU735
top coat:	EFDEDUR-UHS-Topcoat	UR1447NH3307

Application temperature

required 18 to 24 °C

Drying air drying at 20°C

dust dry:	after 80 min.	(degree of drying 1/ DIN EN ISO 9117-5)
dry to touch:	after 12 h	(degree of drying 4/ DIN EN ISO 9117-5)
complete dry:	after 10 days	(swinging beam hardness/ DIN EN ISO 1522)
transportation dry:	after 72 h	Primer + Topcoat with 80 to 90 µm
oven drying	till 80°C possible	(Objec temperatur)

Different drying temperatures and dry film thickness influences the drying time. Lower temperatures and higher film thickness extend the drying times.

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

Test condition

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

The statements concerning efficiency, drying and caution labelling depend on colour shade. The values mentioned in this data sheet are based on UR1447NH6227, carmine red and hardening with HU0400.

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.