FreiLacke

Technical Data Sheet

EFDEDUR

System-HS-Structurecoat
GS9180MT1753 - Trumpf

- Two component system structure paint with solvent
- On powder coating co-ordinated system
- Standard-System: GS1080 EFDEDUR-Structure Paint
- Silicone-free
- Fast drying
- In- and outdoor usage
- For structure effects in a processing step
- Checked after Trumpf RL 40.G016

Technical / physical data	**Resin/ binder**		acryl resin to be hardened with isocyanate
	Colour	GS8180MT1753 =	jet black ca. RAL 9005 nach RAL 840 HR
	Farbtonabweichung to RAL 840HR		max. dE 2,5
	Gloss value DIN 67 530 and DIN EN ISO 2813		matt 8 to 18 geometry 60° (structured)
	Structure		After sample with desired values
	Delivery viscosity = Processing viscosity		4000 to 6000 mPa.s / Spindel 5
	Mixing ratio by weight		10 : 1
	Mixing ratio by volume		7 : 1
	Hardener-Typ base		EFDEDUR-Hardener HU0140 polyisocyanate
	Potlife after hardener addition		approx. 2 h / 20 °C
	Thinner		see „Processing and application“
	Density after hardener addition, calculated		1,5 g / ml + / - 0,1
	Solid content after hardener addition, calculated		78 % + / - 1
	Solid content in volume after hardener addition, calculated		430 ml / kg + / - 30
	Material usage calculated after hardener addition in original viscosity, without application loss		230 g / m² + / - 20 dry film thickness 100 µm see „Special remarks“

Our technical data sheets are to advise you according to our latest state of knowledge. This information does not release you from own tests of our products in view to the ability for the intended procedures and applications. The sale of our products is an accordance with our terms of business and delivery.

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

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.

Processing and application

Application

Components are to be mixed homogeneously (e.g. with high-speed mixer).
Suited application methods are: high pressure, low pressure and spraying-airless.

Delivery viscosity = Processing viscosity.
If necessary to diluted the material for the processing, take:

EFD-Thinner 400320 (fast) or
EFD-Thinner 400474 (slowly)

The application has to done in one processing step (self-creating structure)

spraying-highpressure:	e.g. SATA jet® nozzle: 1,5 to 2,0 mm Atomizer pressure: 2 to 3 bar cross-layer: 1 to 1,5
spraying-airless:	as example WAGNER Aircoat® kind of nozzle: 11/40 Atomizer pressure: 80 to 120 bar spraying pressure: 2 to 3 bar

By changing the spray pressure, nozzle diameter and coating viscosity, pistol and process different surface structures can be achieved. Nozzle- and plant wear are to be considered.

electrostic-spraying:	possible
by roller/ brush:	in original viscosity after hardener addition

Substrates

steel, non ferrous metal: single layer coat

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.

Application temperature

above 10 °C

Drying air drying at 20°C / 100 µm dry film thickness

dust dry:	after 20 min.	(degree of drying 1/ DIN EN ISO 9117-5)
dry to touch:	after 6 h	(degree of drying 4/ DIN EN ISO 9117-5)
complete dry:	after 14 days	(swinging beam hardness/ DIN EN ISO 1522)

With forced drying process and a dry film thickness of over 60 µm a minimum ventilating time of 15 min. 20°C is to be kept. This indication can change due to different climatic conditions.
oven drying: to 100°C possible (object temperature)

Recoatability
after sanding with the same system.

Cleaning of working equipment
EFD-Thinner 400312

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

Resistance
In accordance with customer specification company Trumpf RL 40.G016 and HM 40.G025.
In connection with suitable pretreatment and additional priming the lacquer for the external use is suitable.

Test condition
The statements concerning efficiency and drying on colour shade.

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.