

EFDEDUR

System-Structurecoat GS9141M

- Two component structure paint with solvent
- On powder coating co-ordinated system
- Standard-System: GS1041 EFDEDUR-Structure Paint
- Silicone-free
- Fast drying
- In- and outdoor usage
- For structure effects in a processing step orange peeling and two processing steps splatter effect
- Adhesion on not iron metal

Technical / physical data		Resin/ binder	acryl resin to be hardened with isocyanate
		Colour	between powder coating and RAL-Colour, RAL 840 HR
		Gloss value	after powder sample
		Original viscosity	The delivery viscosity is structure dependent 3000 to 8000 mPa.s / Spindel 6
		Mixing ratio by weight	10 : 1 HU0010 6 : 1 HU0001
		Mixing ratio by volume	8 : 1 HU0010 4,5 : 1 HU0001
Hardener-Typ	coarse structure = micro structure =	EFDEDUR-Hardener HU0010 EFDEDUR-Hardener HU0001 polyisocyanate see „Special remarks“	
base			
Potlife after hardener addition		approx. 6 h / 20 °C	
Thinner		EFD-Thinner 400320 EFD-Thinner 400500	
Density after hardener addition, calculated		1,3 g / ml + / - 0,1	
Solid content after hardener addition, calculated		70 % + / - 3	
Solid content in volume after hardener addition, calculated		395 ml / kg + / - 20	
Material usage calculated after hardener addition in original viscosity, without application loss		190 to 210 g / m ² dry film thickness 70 to 90 µm	
Spreading rate calculated after hardener addition in original viscosity, without application loss		4,5 bis 5,5 m ² / kg dry film thickness 70 to 90 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.

Processing and application

Application

Components are to be mixed homogeneously (e.g. with high-speed mixer).
Suited application methods are: high pressure and low pressure.
Other application methods must be tested.

After hardener addition adjust the viscosity acc. to the selected application procedure.
The application has to be done in two spraying passes:

Splatter-effect (two working steps)

spraying-highpressure: e.g. SATA jet®
nozzle: 1,5 to 2,0 mm
cross-layer: 1 to 2

- 1) smooth surface (atomizer pressure: 3 to 5 bar nozzle)
after a drying time (surface drying) of approx 30 min. / 20 °C
- 2) splatter the required effect appearance on the painted surface,
for this splattering the spraying pressure has to be reduced
(atomizer pressure: 0,5 to 2 bar nozzle)

Self-creating effect (apply the required structure appearance in one working step)

spraying-highpressure: e.g. SATA jet®
nozzle: 1,5 to 2,0 mm
Atomizer pressure: 3 to 5 bar
cross-layer: 1 to 2

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.

electrostatic-spraying: possible
by roller/ brush: e.g. with a short fiber web (microfiber) paint roller.

Substrates

steel: single layer coat
non ferrous metal: lock at Special remarks
plastics, wood: primer necessary

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

substrate: non ferrous metal, e.g. Aluminium
primer: FREIOPOX-Primer ER1912
top coat: EFDEDUR-System-Structurecoat GS9141M

Application temperature

above 10 °C

Drying	air drying at 20°C	
dust dry:	after 30 min.	(degree of drying 1/ DIN EN ISO 9117-5)
dry to touch:	after 5 h	(degree of drying 4/ DIN EN ISO 9117-5)
complete dry:	after 8 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 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.

Special remarks

Information about Hardener and Thinner:

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.

Test condition

The statements concerning efficiency, drying and caution labelling depend on colour shade. The values mentioned in this data sheet are based on GS9141MC1518, light grey, mat adjustment 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.