FreiLacke

Technical Data Sheet

FREOPOX

HighSolid-Primer
ER1980M

- 2-component aktivprimer with solvent
- Very good corrosion protection
- Exellent adhesion
- Wet on wet application
- For industrial goods and all kinds of construction machines

Technical / Physical data	**Resin/ binder**	epoxyde resins
	Colour	in support to RAL 840 HR other colour shades on request
	Gloss value visual	mat
	Original viscosity DIN 53211 without hardener	50 to 55 Sek. / 4 mm cup
	Mixing ratio by weight	8 : 1
	Mixing ratio by Volume parts	4,7 : 1
	Hardener base	FREOPOX-Hardener HE0080 polyamine
	Potlife after hardener addition Only the quantity of ER1980 is to be mixed with HE0080, which can be applied within the respective time.	max. 5 h / 20°C At higher temperatures the potlife will be reduced: approx 4 h / 25°C approx 2 to 3 h / 30°C
	Thinner	EFD-Thinner 400424
	Density after hardener addition calculated	1,43 / ml + / - 0,05
	Solid content after hardener addition calculated	69 % + / - 1
	Solid content in volume after hardener addition calculated	345 ml / kg + / - 5 or 50 % + / - 2
	Consumption calculated after hardener addition in original viscosity, without application loss	145 g / m² dry film thickness 50 µm see „Special remarks“
	Spreading rate calculated after hardener addition in original viscosity, without application loss	6,9 m² / kg dry film thickness 50 µm see „Special remarks“

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. 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 ER1980M tends to seddling. Before hardener addition ER1980M has to be stirred carefully with a high-speed mixer.

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-airless:	in original viscosity after hardener addition
spraying-high pressure:	after hardener addition and viscosity adjustment to 30 to 40 sec. nozzle: 1,5 to 2,0 mm spraying pressure: approx. 5 bar
by roller/ brush:	in original viscosity after hardener addition

Substrates

steel, stainless steel, aluminium, galvanized steel (hot-dip galvanized)

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	ER1980M
top coat:	EFDEDUR-HighSolid-Paint	UR1991

We recommend to top coat ER1980 within only few hours after primer applikation, in order to avoid any defect of the intermediate adhesion we recommend.

Application temperature

above 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	18	h	(degree of drying 4/ DIN 53150)
complete dry:	after	10	days	(swinging beam hardness/ ISO 1522)
dry to handle:	after	72	h	primer and top coat with 80 to 90 µm

Other drying temperatures and other dry film thicknesses influence the drying time.
Lower temperatures and higher film thicknesses will prolong the drying time.

Recoatability

With itself after previous cleaning, at any time possible.

Cleaning of working equipment

With EFD-Thinner 400424 within the working time, completely dried paint can only mechanically be removed.

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

Excellent adhesion on iron, galvanized steel, aluminium and stainless steel with a very good corrosion protection under atmospherical stress at land- and sea climate.

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 ER1980MRU735, lightgrey.

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.