

FREOPOX

Primer ER1912M

- 2-component aktivprimer with solvent
- Very good corrosion protection by zinc phosphate
- Exellente adhesion
- Good application characteristics
- As adhesion promotor suitably
- Well suited in Steel construction industry
- Wet on wet application

Technical / Physical Data	Resin/ binder	epoxy resins		
	Colour	following RAL 840 HR other colour shades on request		
	Gloss value visual	mat		
	Original viscosity without hardener	1300 bis 2300 mPa.s / Sp.4		
	Mixing ratio by weight	HE0052 = 5 : 1 HE0915 = 10 : 1		
	Mixing ratio by volume	HE0052 = 3,08 : 1 HE0915 = 6,32 : 1		
	Hardener base	FREOPOX-Hardener HE0052 FREOPOX-Hardener HE0915 Polyamin		
	Potlife after hardener addition	max. 24 h / 20°C see „Special remarks“		
	Thinner	EFD-Thinner 400424		
	Density after hardener addition calculated	HE0052 = 1,35 g / ml HE0915 = 1,40 g / ml	+ / - 0,1 + / - 0,1	
	Solid content after hardener addition calculated	HE0052 = 62 % HE0915 = 67 %	+ / - 2 + / - 3	
	Solid content in volume after hardener addition calculated	HE0052 = 315 ml / kg 42,5 Vol.% HE0915 = 340 ml / kg 47,5 Vol.%	+ / - 10 or + / - 1,5 + / - 10 or + / - 1,5	
	Consumption calculated after hardener addition in original viscosity, without application loss	HE0052 = 250 g / m ² HE0915 = 235 g / m ²		dry film thickness 80 µm see „Special remarks“
	Spreading rate calculated after hardener addition in original viscosity, without application loss	HE0052 = 4,0 m ² / kg HE0915 = 4,2 m ² / kg		dry film thickness 80 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).

FREOPOX-Hardener HE0052

spraying-airless:	in original viscosity after hardener addition
spraying-high-pressure:	in original viscosity after hardener addition
by roller/ brush:	in original viscosity after hardener addition

FREOPOX-Hardener HE0915

spraying-airless:	after hardener addition and viscosity adjustment to 50 to 70 sec / 4 mm cup DIN 53211
spraying-high-pressure:	after hardener addition and viscosity adjustment to 30 to 50 sec / 4 mm cup DIN 53211
by roller/ brush:	in original viscosity

Substrates

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

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, purity at least SA 2 ½ "DIN EN ISO 12944-4") pretreatment.

Proposal for a coating system

primer:	FREOPOX-Primer	ER1912M
base laquer:	FREOPOX-Paint	ER1902 or
	FREIOPLAST-Paint	KP1610/ KP1613 or
	EFDEDUR-Paint	UR1044

Application temperature

above 10 °C

Drying

air drying at 20°C

HE0052/ HE0915

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 10 days	(swinging beam hardness/ DIN EN ISO 1522)
oven drying:	to 80°C possible	(object temperature)
	In the case of forced drying process the hardening is accelerated.	

Overpaintableness

after 20 min. / 20 °C
During intermediate drying of more than 72 hr. / 20 °C
the recoatability must be checked.

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 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

For container inside areas as a "Primer Finish" applicable.
Due to different kinds of zinc coatings we recommend preliminary tests (e.g. adhesion, climate test a.s.o.).
For roller application FREOPOX-hardener HE0915 is more usefull as the application viscosity will be increased.

Alternative hardener

hardening from 5 °C possible (pay attention to drew point)

HE0168 FREOPOX-Hardener (rapid-reactively) - low viscosity

- accelerated hardener version of HE0052
- mixing ratio 5 : 1 (by weight)
- potlife 12 h / 20 °C

Restistance

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 and drying depend on colour shade.
The values mentioned in this data sheet are based on ER1912MRU735, light-grey.

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.