

## **Technical Data Sheet**

# **FREOPOX**

## Clearcoat ER1904GRA999

- 2K-Clearcoat with solvent
- Hardening with polyamide or aminadduct
- Good resistance with abrasion, industrial chemicals, oils, grease and so on
- Good adhesion on metallic undergrounds

<b>Technical</b>	I	Physical
Data		

Resin/ binder	epoxy resins	
Colour	colourless	
Gloss value visual	glossy	
Original viscosity DIN 53211*, without hardener	12 to 17 Sek. / 4 mm cup	
Mixing ratio by weight	4 : 1 HE0020 or 5 : 1 HE0915	
<b>Hardener</b> base	FREOPOX-Hardener HE0020 / aminadduct FREOPOX-Hardener HE0915 / polyamide see "Special remarks"	
Potlife after hardener addition	max. 12 h / 20°C	
Thinner	EFD-Thinner 400424	
Density after hardener addition calculated	1,0 g / ml + / - 0,1	
Solid content after hardener addition calculated	35 % + / - 3	
Solid content in volume after hardener addition calculated	315 ml / kg + / - 5	
Consumption Calculated, after hardener addition in original viscosity, without application loss	93 to 97 g / m² dry film thickness 30 µm see "Special remarks"	
Spreading rate Calculated, after hardener addition in original viscosity, without application loss	10,3 to 10,7 m² / kg dry film thickness 30 µm see "Special remarks"	

#### Storability

Approx. 18 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

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

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## Processing and application

## **Application**

Components are to be mixed homogeneously (e.g. with high-speed mixer).

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

nozzle: 1,4 mm spraying pressure: 3 to 4 bar

by roller/ brush: in original viscosity after hardener addition

## Substrates

steel, aluminium

#### **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: aluminium

top coat: FREOPOX-Clearcoat ER1904GRA999

## **Application temperature**

above 10 °C

**Drying** air drying at 20°C

dust dry:after 90 min.(degree of drying 1/ DIN 53150)dry to touch:after 24 h(degree of drying 4/ DIN 53150)complete dry:after 7 days(swinging beam hardness/ ISO 1522)

after 30 days chemically loadable

oven drying: to 70°C possible (object temperature)

## Overpaintableness

With itself after sanding, 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

## Information about Hardener and Thinner

The hardener and the thinner mentioned on page 1 are stated as standard componentes 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.

Hardener are taking influence on the gloss (see page 1).

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#### Resistance

## FREOPOX-Hardener HE0020

Hardening reaction with 95 % humidity and hardening temperature above 5 °C still perfectly. Improves hardness and chemical stability as HE0915.

## FREOPOX-Hardener HE0915

Sensitivity with high humidity, coating properties at hardening temperatures of over 10 °C perfectly, at hardening temperatures under 10 °C more badly (e.g. process, surface tackness, veil, strong reaction delay), inexpensive hardener combination.

#### **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.

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.

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