

TECHNICAL DATA SHEET

PE-0084 / PE-0086

DBS 918 340

Article No.: 13594

Version: 7

POLYFLEX[®] EP-20-Korroflexprimer-NT-GU smooth Corona silk matt 20

Description: Low bake powder primer based on epoxy resins. Gives matt surfaces with very good flow. Enables significantly increased corrosion resistance due to very good degassing, wetting and edge covering properties. Excellent substrate adhesion along with very good intercoat adhesion makes this powder coating suitable for overcoating.

Applications: Railings, hydrants, all kinds of diecast parts, fixtures, machine housings, and many more.

Colours: RAL 7035, 7043, 1M1269 PP oxide red, 2M4933 white (approx. RAL 9010, 3M1805 PP olive green, 3M1806 PP black – special dones available on request (minimum volume)

Surface: Smooth

Gloss: Visually silk matt
5 – 25 Gloss units (60°)

Powder properties:

Particle size distribution (HELOS H1708)	29 µm: 40 – 47 %
	122 µm: 98 – 100 %
Density	1.3 – 1.7 g/cm ³ can vary depending on the colour; can be specified for each individual colour

Material consumption: g/m² = density (g/cm³) x film thickness (µm)

Coating thickness:

Recommended	70 – 90 depending on the colour tone
Maximum	150 µm

Application: The application can be made with all standard powder coating systems. Better results in terms of outgassing are obtained if the powder primer is cured before the top coat and not just gelled on. To avoid surface defects, we recommend not mixing this type of powder coating with other powder coatings.

Packaging:

- 20/25 kg cardboard box
- 500 kg Octobox
- 450/500 kg Big Bag

Other packaging variations are available on request.

Curing time: **Recommended**
15 min. at 160°C object temperature

Object temperature	Minutes hold time min	Minutes hold time max
200°C	6 min	10 min
190°C	7 min	12 min
180°C	9 min	15 min
170°C	12 min	20 min
160°C	15 min	25 min

Substrates: Steel/iron, hot-dip galvanizing, aluminium. The substrate to be coated must be free of oil, grease and oxidation products. We recommend the following pre-treatments:

Aluminium	A suitable wet-chemical pretreatment or sweeping
Steel	Blasting with a suitable blasting agent (cleanliness level at least SA 2.5 in accordance with DIN 55928 part 4, "bare metal") or A suitable wet chemical pretreatment.

Physical properties: Tested on 1): Steel panel 0.8 mm ST1405 pickled twice V1094
Layer thickness: 70 – 90 µm

Cross Cut test (DIN ISO 2409)	1) GT 0
Mandrel bending test (DIN ISO 1519)	1) $\leq 8^*$ mm
Impact resistance (ASTM D 2794)	1) front ≥ 5 Nm* (~44 Inchpound)
	1) reverse ≥ 2.5 Nm* (~22 Inchpound)
Erichsen cupping (DIN ISO 1520)	1) $\geq 3^*$ mm
(*) cracks; no peeling with adhesive tape;	
Resistance:	Tested on: Steel sheets S235 JR, radiation SA 2 ½, roughness grade medium (G)
Condensation water test (DIN ISO 6270)	480 h no blistering Infiltration on the scratch track under 1 mm
Salt spray test (DIN ISO 9227)	720 h no blistering Infiltration on the scratch track under 1 mm
Scoring of the sheets according to DIN EN ISO 12944-6 Annex A. Scoring tool: Scoring pin according to van Laar, model 426	
Material Approvals:	-
Qualisteelcoat C4-H:	PE-0084 with the following structure: steel SA 2.5 (30-40 μ m roughness depth), zinc phosphating, dop coat PES-135 (Qualicoat P-1131) PE-0086 with the following structure: Steel SA 2.5 (30-40 μ m peak-to-valley height), zinc phosphating, top coat PUR-151
C5 M / I lang DB	According to DIN EN ISO 12944-6 - IFO report on request Product qualification of Deutsche Bahn according do DBS 918 340
Repairs:	For repairs (conveyors hangers touch ups) the repair kit, art. No 10006124 is available.
Post treatment of coated parts:	Appropriate preliminary tests are recommended for printing, gluing, labeling, film lamination, overcoating and other post treatments. Suitable plasticizer free materials are to be used for the packaging. Avoid condensation.
Storage:	Storage instruction: In the original containers, store in a cool and dry environment at max. 25 °C. No direct sun exposure.
	Shelf life: 18 months from the date of production under the mentioned conditions.
Safety recommendations:	Lower explosive limit Please refer to the safety data sheet.
Further information can be found in the safety data sheet and the CEPE brochures "safe powder coating guideline" and "results of the experimental toxicological studies on thermosetting powdercoatings".	
Comments:	The information in this technical data sheet relative to the properties and application of the product concerned are made on hand of our knowledge, development and practical experience. Because of the multiple possible applications, it is impossible for us to present them all in detail. Our technical consultants are at your disposal for any question you might have. Furthermore, our general sales and delivery conditions apply. This technical data sheet is revised periodically. If necessary, our sales department will confirm the validity of this document.
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