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TECHNICAL DATA SHEET

Article No.: 14071
Version: 2

POLYFLEX® PES-166-NT-GU smooth Tribo/Corona silk gloss

Description:	Low bake powder for outdoor use based on polyester resins. Gives silk gloss surfaces with good flow and good light and weathering resistance. The product exhibits very good degassing properties. Stabilized against overcuring and discolouration in directly gas fired ovens.		
Applications:	Switchboards, noise barriers, garden furniture, garden dools, air conditioners and fans, doors and gates and many others		
Colours:	Almost any colour with few limitations		
Surface:	Smooth		
Gloss:	Visually silkgloss 60 – 80 Gloss units (60°)		
Powder properties:	**Particle size distribution** (HELOS H1708)	29 µm: 40 – 47 % 122 µm: 99 – 100 %	
	Density	1.4 – 1.8 g/cm³ 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	120 µm	
Application:	The application can be made with all standard powder coating systems. To avoid surface defects and to prevent deterioration of the properties, 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** 10 min. at 160°C object temperature		

Object temperature	Minutes hold time min	Minutes hold time max
200°C	4 min	8 min
190°C	5 min	10 min
180°C	6 min	12 min
170°C	8 min	15 min
160°C	10 min	20 min

Substrates:	Mainly hot-dip galvanized steel and appropriately pre-treated aluminium. Coatings can also be applied to KTL or powder coating primers. The substrate to be coated must be free of oil, grease and oxidation products. We recommend the following pre-treatment under corrosion stress:	
	Aluminium	A suitable wet-chemical pretreatment or sweeping
	Steel	A suitable wet-chemical pretreatment
Physical properties:	Tested on 1): Aluminium panel 0.8 mm AlMg1 H14 chromated Layer thickness: 70 – 90 µm	
	Cross Cut test (DIN ISO 2409)	1) GT 0

KARL BUBENHOFER AG | Hirschenstrasse 26 | 9201 Gossau SG, Switzerland
T +41 71 387 41 41 | info@kabe-farben.ch | kabe-farben.ch

	Mandrel bending test (DIN ISO 1519)	1) ≤ 6 mm		
	Impact resistance (ASTM D 2794)	1) front	≥ 2.5 Nm	(~22 Inchpound)
		1) reverse	≥ 2.5 Nm	(~22 Inchpound)
	Erichsen cupping (DIN ISO 1520)	1) ≥ 5 mm		
	Buchholz Hardness (DIN ISO 2815)	≥ 90		
Resistance:	Tested on: Aluminium panel 0.8 mm AlMg1 H14 chromated			
	Condensation water test (DIN ISO 6270)	1000 h no blistering Infiltration on the scratch track under 1 mm		
	Salt spray test (DIN ISO 9227	1000 h no blistering Infiltration on the scratch track under 1 mm		
Material Approvals:	-			
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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