TECHNICAL DATA SHEET

Article No.: 14704 **Version:** 2	**POLYFLEX® PES-55-NT-DS smooth thin coat Corona silk gloss**
Description:	Low bake thin coat powder for indoor use based on polyester and epoxy resins. Gives silk gloss surfaces with good flow. Stabilized against overcuring and discolouration in directly gas fired ovens.
Applications:	Metal furniture, shelving components, control cabinets, wardrobe cabinets, machine casings, lamp casings, kitchen appliances, etc.
Colours:	Almost any colour with few limitations
Surface:	Smooth
Gloss:	Visually silkgloss 65 – 85 Gloss units (60°)

Powder properties:	**Particle size distribution** (HELOS H1708)	7 µm: 8 – 13 % 31 µm: 61 – 66 %
	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**	40 – 70 depending on the colour tone
	Maximum	80 µm

Application:	The application can be made with all standard powder coating systems. 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**
10 min. at 150°C object temperature

Object temperature	Minutes hold time min	Minutes hold time max
190°C	3 min	6 min
180°C	4 min	8 min
170°C	5 min	10 min
160°C	7 min	15 min
150°C	10 min	25 min

Substrates:	Various metals or also as a top coat, e.g. on a KTL primer. The substrate to be coated must be free of oil, grease and oxidation products. We recommend the following pre-treatments under load:	
	Aluminium	A suitable wet-chemical pretreatment
	Steel	Iron or zinc phosphating

Physical properties:	Tested on 1): Steel panel 0.8 mm ST1405 pickled twice V1094 Layer thickness: 30 – 50 µm	
	Cross Cut test (DIN ISO 2409)	1) GT 0

	Mandrel bending test (DIN ISO 1519)	1) ≤ 5 mm		
	Impact resistance (ASTM D 2794)	1) front	≥ 5 Nm	(~44 Inchpound)
		1) reverse	≥ 5 Nm	(~44 Inchpound)
	Erichsen cupping (DIN ISO 1520)	1) ≥ 5 mm		
	Buchholz Hardness (DIN ISO 2815)	≥ 90		
Resistance:	Tested on: Steel panel iron phospated			
	Condensation water test (DIN ISO 6270)	500 h no blistering Infiltration on the scratch track under 1 mm		
	Salt spray test (DIN ISO 9227)	240 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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