

## TECHNICAL DATA SHEET

Article No.: 13730

Version: 5

### POLYFLEX® PES-140-SD Pearl-Metallic fine structure Corona matt

**Description:** Superdurable Pearl metallic powder for outdoor use based on polyester resins. Gives matt surfaces with fine structure and excellent light and weather resistance. Stabilized against overcuring and discolouration in directly gas fired ovens.

**Applications:** Metal facades, aluminium profiles, sun protection systems, windows, doors, gates, etc

**Colours:** Almost any colour with few limitations

**Surface:** Smooth

**Gloss:** Visually matt

**Powder properties:**

<b>Particle size distribution</b> (HELOS H1708)	29 µm: 38 – 45 %
	122 µm: 98 – 100 %
<b>Density</b>	1.4 – 1.7 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

**Application:** The application can be made with all standard powder coating systems. In order to achieve a uniform texture, the recommended coating thickness should be adhered to as far as possible. If the coating thickness is too low, pores will form down to the substrate. Please observe our processing instructions for textured powder coatings VR001D and for metallic effect VR003D. In order to avoid surface defects and not to change the properties, we recommend not mixing this powder coating type 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 200°C object temperature

Object temperature	Minutes hold time min	Minutes hold time max
210°C	8 min	14 min
200°C	10 min	18 min
190°C	15 min	26 min
180°C	25 min	40 min

**Substrates:** When overcoating already painted surfaces, it is essential to check adhesion in advance. For application directly to metal, the substrate must be free of oil, grease and oxidation products. We recommend the following pre-treatment if the surface is subject to corrosion:

<b>Aluminium</b>	A suitable wet-chemical pretreatment or sweeping
<b>Steel</b>	Iron or zinc phosphating

**Physical properties:** Tested on 1): Aluminium panel 0.8 mm AlMg1 H14 chromated  
Layer thickness: 70 – 90 µm

<b>Cross Cut test</b> (DIN ISO 2409)	1) GT 0
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<b>Mandrel bending test</b> (DIN ISO 1519)	1) ≤ 5* mm
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	<b>Impact resistance</b> (ASTM D 2794)	1) front $\geq 2.5 \text{ Nm}^*$ (~22 Inchpound)
		1) reverse $\geq 2.5 \text{ Nm}^*$ (~22 Inchpound)
	<b>Erichsen cupping</b> (DIN ISO 1520)	1) $\geq 5^* \text{ mm}$
(*) cracks; no detachment with adhesive tape, with unarmed eye		
<b>Resistance:</b>	Tested on: Aluminium panel 0.8 mm AlMg1 H14 chromated	
	<b>Condensation water test</b> (DIN ISO 6270)	1000 h no blistering Infiltration on the scratch track under 1 mm
	<b>Salt spray test</b> (DIN ISO 9227)	1000 h no blistering Infiltration on the scratch track under 1 mm
<b>Material Approvals:</b>	-	
<b>Repairs:</b>	For repairs (conveyors hangers touch ups) the repair kit, art. No 10006124 is available.	
<b>Post treatment of coated parts:</b>	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.	
<b>Storage:</b>	<b>Storage instruction:</b>	In the original containers, store in a cool and dry environment at max. 25 °C. No direct sun exposure.
	<b>Shelf life:</b>	18 months from the date of production under the mentioned conditions.
<b>Safety recommendations:</b>	<b>Lower explosive limit</b>	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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