

TECHNICAL DATA SHEET

Article No.: 13104
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 Version: 5

POLYFLEX® PES-30 metallic bonded smooth abrasion resistant Corona Silk gloss

Description: Bonded metallic powder coating on polyester and epoxy resins with excellent solvent and chemical resistance combined with excellent scratch and abrasion resistance. Results in coatings with very good flow and good covering strength. Good overcuring stability, universally applicable.

Applications: Metal furniture, shelves elements, machine casing and many more

Colours: Colours on request

Surface: Smooth texture

Gloss: Silk-gloss

Powder properties:

Particle size distribution (HELOS H1708)	smaller 29 µm: 40 – 47 % smaller 122 µm: 96 – 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 µm depending on the colour tone
Maximum	120 µm

Application: The application can be made with the usual electrostatic powder coating systems. Please read our user information for powder coating with metallic effect VR003D. To avoid any surface disturbances, we recommend not to mix it with any other powder paint. Do not cure this coating while other powder coatings are present in the same oven!

Packaging:

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

Other packaging variations are available on request.

Curing time:

Recommended	13 min at 180 °C object temperature
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Curing conditions:

Object temperature	Minutes hold time
210 °C	5 min.
200 °C	6 min.
190 °C	8 min.
180 °C	13 min.

Substrates: Different metals, also as top-coat, for example on cathodic anti-corrosion dip-coating. The substrate to be coated has to be free of oil, grease and oxidation products. Under corrosive environments we recommend following pretreatments:

Aluminum	A suitable chemical pretreatment
Steel	Iron or zinc phosphating

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<p>Physical properties: Tested on: Steel sheet 0.8mm ST1405 double-pickled V1094</p> <p>Layer thickness: 70 – 90 µm</p>	<p>Cross cut test (DIN ISO 2409) GT 0</p> <p>Mandrel bending test (DIN ISO 1519) 1) ≤ 5 mm</p> <p>Impact resistance ASTM D 2794 1) front ≥ 10 Nm (~88 inchpound) 1) reverse ≥ 5 Nm (~44 inchpound)</p> <p>Ericksen cupping (DIN ISO 1520) 1) ≥ 5 mm</p>
<p>Resistance: Tested on: steel sheet iron phosphated</p>	<p>Condensation water test DIN ISO 6270 500 h no blistering Infiltration on the scratch track under 1 mm</p> <p>Salt spray test DIN ISO 9227 240 h no blistering Infiltration on the scratch track under 1 mm</p>
<p>Post treatment of coated parts:</p>	<p>To print, to paste, to label, to laminate with film, over-coating and other post-treatments , preliminary testing is recommended. For packaging only use appropriate plasticizers free materials. Condensation must be avoided.</p>
<p>Repairs:</p>	<p>For repairs (conveyors hangers touch ups) the repair kit, art. No 12155 is available.</p>
<p>Storage:</p>	<p>Storage instruction: In the original containers, store in a cool and dry environment by max. 25 °C. No direct sun exposure.</p> <p>Shelf life 18 months from the date of production under the mentioned conditions.</p>
<p>Safety recommendations.</p>	<p>Lower explosive limit Please refer to the safety data sheet.</p> <p>Further information are to find in the safety data sheet and the CEPE booklet „Safe powder coating“ and „Results of experimental toxicology study on thermosetting powder coatings“.</p>
<p>Comments:</p>	<p>The information on 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.</p>