



115j

P-1131

## Technical data sheet

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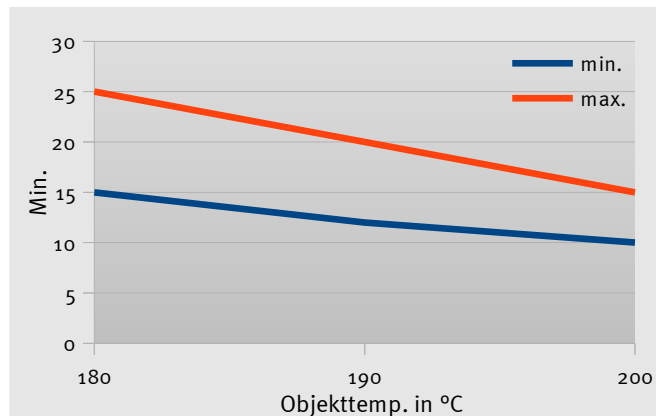
### POLYFLEX® PES-135 Pearl-Metallic bonded smooth texture, Corona silk-matt

Bonded metallic powder coatings for exterior use on polyester base with excellent light and weather resistance, very good smooth and excellent opacity. Stabilized against discoloration and burning gas-fired curing ovens in directly.

<b>Applications</b>	Metal facade, Aluminium profile, sun protection systems, windows, doors, gates and frames and many more
<b>Colours</b>	According to special Pearl Metallic color cards. Special colors on request
<b>Surface</b>	smooth texture
<b>Gloss</b>	Silk-matt
<b>Powder properties</b>	<p><b>Particle size distribution</b> smaller 29 µm: 40 – 47 %  <small>(HELOS H1708)</small> smaller 122 µm: 96 – 100%</p> <p><b>Density</b> 1.4 – 1.8 g/cm<sup>3</sup> different depending on the colour can be specified per colour</p>
<b>Material consumption</b>	$g/m^2 = \text{Density (g/cm}^3) \times \text{Film thickness (}\mu\text{m)}$
<b>Coating thickness</b>	<p>Recommended 60 – 80 µm depending on the colour</p> <p>Maximum 120 µm</p>
<b>Application</b>	<p>The application can be made with all common powder coating equipment. Please read our application instruction for POLYFLEX powder coatings with Metallic-effect VR003D.</p> <p>To avoid any surface disturbances, we recommend not to mix this type of powder paint with any other powder.</p>
<b>Packaging</b>	<ul style="list-style-type: none"> <li>- 20/25 kg Cardboard</li> <li>- 500 kg Octobox</li> <li>- 450/500 kg Big Bag</li> </ul> <p>Other packaging variations are available on request.</p>

#### Baking diagram

Curing time recommendation: 15 min by 180 ° C object temperature



#### Curing conditions:

200°C	10 min. hold time
190°C	12 min. hold time
180°C	15 min. hold time

## Supports

Different metals, however mainly on pre-treated aluminum or hot-dip galvanized or powder coated or anti-corrosion dip-coated steel. The support to be coated has to be free of oil, grease and oxidation products. Under exposure to corrosion, we recommend the following pre-treatment:

**Aluminum** Chroma ting, chrome free pre-treatment or thin layer of anodizing coat  
**Steel/Iron** Galvanization with subsequent chroma ting

## Physical properties

tested on:

Aluminium plate 0,8 mm AlMg1  
H14 chromated

Film thickness  
60 – 80 µm

**Cross cut test** GT 0  
(DIN ISO 2409)

**Mandrel bending test** < 5 mm  
(DIN ISO 1519)

**Impact resistance** front > 5.0 Nm (~44 inchpound)  
ASTM D 2794 reverse > 2.5 Nm (~22 inchpound)

**Erichsen cupping** > 5 mm  
(DIN ISO 1520)

**Buchholz hardness** > 90  
(DIN ISO 2815)

## Resistance

tested on:

Aluminium plate 0,8 mm AlMg1  
H14 chromated

**Condensation water test** 1000 h no bubble building  
DIN ISO 6270 Infiltration on the scratch under 1 mm

**Salt spray test** 1000 h no bubble building  
DIN ISO 9227 Infiltration on the scratch under 1 mm

## Material approval

**GSB Standard** 115j  
**Qualicoat Class 1** P-1131

## Post treatment of coated parts

To print, to paste, to label, to laminate with film, over-coating and other post-treatments , some preliminary testing is recommended. For packaging only use appropriate plasticizers free materials. Condensation must be avoided.

## Repairs

For repairs (conveyors hangers touch ups) the repair kit, art. No 12155 is available.

## Storage

**Storage instruction:** In the original containers, store in a cool and dry environment by max. 25 °C. No direct sun exposure.

**Shelf life** 18 months from the date of production under the mentioned conditions

## Safety recommendations

**Under explosion limit** 40 g/m<sup>3</sup>

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“.

Comments:

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.



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