



Technical data sheet

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 Leaflet: 3138
 Version: 01

POLYFLEX® PES-140-SD Qualibond Pearl-Metallic structure fine highly weather resistant Corona matt

Matt and structured bonded Pearl Metallic powder coating on polyester resin basis for highly weather resistant coatings in the facade area with excellent light and weather resistance, fine, non rough structure and very good covering properties. The weather resistance is significantly higher compared to standard facade powder. Stabilizes against over burning and discolouration in directly gas-fired stoves.

Applications	Metal facade, Aluminium profiles, sun protection systems, windows, doors, gates and many more.
Colours	on request
Surface	structure fine
Gloss	matt
Powder properties	<p>Particle size distribution smaller 29 µm: 38 – 45 % <small>(HELOS H1708)</small> smaller 122 µm: 98 – 100%</p> <p>Density 1.4 – 1.7 g/cm³ can vary depending on the colour can be specified per colour on request</p>
Material consumption	g/m ² = Density (g/cm ³) x Film thickness (µm)
Coating thickness	Recommended 70 – 90 µm depending on the colour

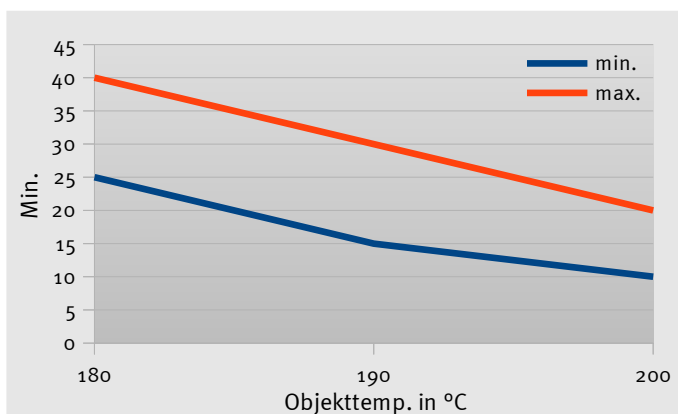
Application The application can be carried out with all common electrostatic systems. In order to obtain a uniform structure, the recommended coating thickness should be adhered to as far as possible. If the layer thickness is too low, pores will form right up to the substrate. Please observe our processing instructions for structured powder coatings VR001D and for metallic effect VR003D. In order to avoid surface disturbances and not to change the properties, we recommend not to mix this powder coating type with other powder coatings.

Packaging

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

Other packaging variations are available on request.

Baking diagram Curing time recommendation: 10 min. by 200 °C object temperature



Curing conditions:

210°C	8 min. hold time
200°C	10 min. hold time
190°C	15 min. hold time
180°C	25 min. hold time

Substrates

Different metals, however mainly on pre-treated aluminium 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:

Aluminium a suitable chemical pre-treatment

Steel/Iron iron or zinc phosphating

Physical properties

tested on:

Aluminium plate 0,8 mm AlMg1
H14 chromated

Film thickness
70 – 90 µm

Cross cut test GT 0
(DIN ISO 2409)

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

Impact resistance front ≥ 2.5 Nm* (~22 inchpound)
ASTM D 2794 reverse ≥ 2.5 Nm* (~22 inchpound)

Erichsen cupping ≥ 5 mm*
(DIN ISO 1520)

(*): cracks; no peeling with adhesive tape,
with the naked eye

See also current testing standards "Qualicoat" for class 2

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

Qualicoat Class 2 P-1528

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

Lower explosive limit please refer to the safety data sheet

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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