

## Technical data sheet

Article No.: **11210** 

Leaflet No.: 1779 Version: 04

# POLYFLEX® PES-50 rough structure

Corona matt

Powder paint with rough structure for interior use on the basis of polyester and epoxy

resins with excellent covering power and good resistance to chemicals.

Curing can take place above 180 ° C.

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

Colours Many colours, white and very bright shades are not recommended

Surface Structure rough

Gloss Visual matt

**Powder properties** Particle size distribution smaller 29 μm: 38 – 45%

(HELOS H<sub>1708</sub>) smaller 122  $\mu$ m: 98 – 100%

**Density** 1.3 – 1.7 g/cm<sup>3</sup> can vary depending on the colour,

can be specified per colour individually on request

**Material consumption**  $g/m^2 =$  Density  $(g/cm^3) x$  Film thickness  $(\mu m)$ 

**Coating thickness** Recommended 80 – 100 µm depending on the colour

Maximum 150 µm

**Application** The application can be made with the usual electrostatic powder coating systems.

The powder tends to yellowing, the baking process is therefore devote most attention.

Please read our application instruction for structured powder VR001D.

To avoid any surfaces disturbances, we recommend not to mix this type of powder with

any other powder paint.

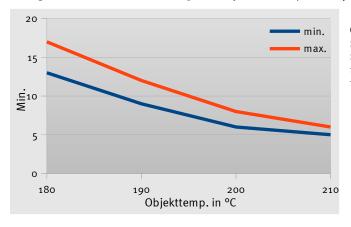
Packaging - 20/25 kg cardboard

- 500 kg Octobox
- 450/500 kg Big Bag

Other packaging variations are available on request.

### **Baking diagram**

### Curing time recommendation: 13 min. by 180 °C object temperature



#### **Curing conditions:**

210°C 4 min. hold time 200°C 6 min. hold time 190°C 8 min. hold time 180°C 13 min. hold time **Substrates** Various metals or as top coat on a KTL pre-treated surface. The support to be coated

has to be free of oil, grease and oxidation products. Under exposure to corrosion, we

recommend the following pre-treatments:

Aluminium a suitable chemical pretreatment

GT o

Steel/Iron Iron or zinc phosphating

The pre-treatment can both be applied with dipping or spraying methods.

Physical properties Cross cut test

(DIN ISO 2409) tested on:

steel sheet o.8mm ST1405 double pickled V1094

Film thickness

80 - 100 µm

Mandrel bending test

(DIN ISO 1519)

(~44 inchpound) Impact resistance front ≥ 5 Nm (~22 inchpound) ASTM D 2794 reverse ≥ 2.5 Nm

≤ 8 mm

Erichsen cupping ≥ 2mm

(DIN ISO 1520)

Resistance Condensation water test 500 h no bubble building

DIN ISO 6270 Infiltration on the scratch track under 1 mm tested on:

Salt spray test 240 h no bubble building iron phosphate steel sheet

> DIN ISO 9227 Infiltration on the scratch track under 1 mm

Post treatment of coated

parts

To print, label, foil laminating, over coating and any other post-treatment, 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 in question 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

This technical data sheet is revised periodically. If necessary, our sales department will confirm the validity of this document.

