

ELM PLA45

Technical Data Sheet

ELM PLA45 *Outdoor quality*

ELM PLA45 is matt thermosetting powder coating based on saturated polyester resin base, the corresponding hardener plus special heat, light and chalk resistant pigments. Thanks to special resin technology they have very good outdoor quality and flow.

Characteristics

- Very good weather and light resistance
- Matt surface
- Excellent mechanical properties
- Good general resistance properties
- No VOC

Powder specifications

- Particle size < 300 µm
- Average particle size 30-60 µm
- Solids > 99%
- Density 1,3-1,8 gr/cm³
- Storage stability min 12 months
- Storage Temperature cool and dry at < 25° C

Applications

- Facade elements, window profiles
- Doors
- Agricultural machines
- Garden and Camping furniture
- Lights
- Bicycle frames

Product range

Surface appearance

ELM PLA45

Smooth matt, wrinkle effect

Colors

Mainly RAL, Pantone and NCS shades, special shades on request

Product performance

To obtain the following data, ELM PLA45 was coated as follows

Degreased steel 0,5 mm
Coating thickness 70-100 µm
Object temperature 200 °C 10 min

Test	Method	Result
Impact	ASTM D2794	> 20 kgcm
Erichsen cupping	ISO 1520	> 5 mm
Buchholz hardness	ISO 2815	> 90
Mandrel bending		< 5 mm
Cross-cut adhesion	ISO 2409	GT 0

Condensed water and salt spray test results depend on pre-treatment of metal
> 400 hrs condensed water test DIN 50017; no infiltration, no blisters for zinc fosfate steel
> 400 hrs nautral salt spray test ISO 9227; no infiltration, no blisters for zinc fosfate steel
> 1000 hrs nautral salt spray test ISO 9227; no infiltration, no blisters for chromated aluminium

Application instructions

The substrate to be coated must be free of dirt, oil, rust etc.

For aluminium depending on intended purpose, degreasing or chromatising

For steel metal depending on intended purpose, degreasing, Fe –phosphating or Zinc phosphating

ELM PLA45 can be applied by all commercial electrostatic systems both corona.

Curing Schedule

Object temperature	Retention time at object temperature
190 °C	15 min
200 °C	10 min
210 °C	8 min

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