

Technical Data Sheet

ELM PLA30 Outdoor quality

ELM PLA30 is a TGIC-free thermosetting powder coating based on a saturated polyester resin, its corresponding hardener, plus special heat-, light-, and chalk-resistant pigments. Thanks to its special resin technology, it provides very good outdoor durability and flow. It offers good yellowing resistance combined with excellent overall performance. It is approved by Qualicoat.

Characteristics

- Very good weather and light resistance
- **TGIC free**
- **Approved by Qualicoat (P-1472)**
- Excellent flow
- 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 24 months (min 12 months for metallic color)
- Storage Temperature cool and dry at < 25° C

Applications

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

Product range

ELM PLA30



Surface appearance

Smooth gloss, Smooth semigloss, Smooth semimatt.

Colors

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

Product performance

To obtain the following data, ELM PLA30 was coated as follows

Degreased steel 0,5 mm
Coating thickness 60-80 µm
Object temperature 180 °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 PLA30 can be applied by all commercial electrostatic systems both corona and tribo

Curing Schedule

Object temperature	Retention time at object temperature
170 °C	15-17 min
180 °C	10-12 min
190 °C	8-10 min

DISCLAIMER: All the information given in this technical data sheet is the result of our experience. Application, use and processing of the products take place outside our ability to supervise and therefore exclusively applicator's responsibility. The policy of product development, this specification is subject to change without notice.