

# **TECHNICAL DATA SHEET**

PF - POLYESTER POWDER COATINGS QUALICOAT Type of coating

RAL 5012

PF124/0/3434/09 Symbol

Gloss level Satin matt

Characteristics

**Applications** 

Color

Surface

- Outdoor, architectural application

- Powder coating approved by QUALICOAT

- High weather resistance - High UV-light resistance

- High color stability under various curing conditions

- High covering power

Fine structure

- Decorative and protective effect

- High mechanical resistance

Metal facades, aluminum profiles, windows, doors, gates and frames, etc.

Fine powder suitable for electrostatic spray (corona) and tribocharging (tribo). **Powder properties** Particle size (Malvern)

> Density (g/cm³) 1,414

ISO 8130-2

Theoretical coverage (m²/kg)

~12 by the film thickness 60 µm and 100 % use of powder coating.

24 months from the date of production, in the orginal, unopened package, keep away from heat sources, in the temperature of  $5-25^{\circ}\text{C}$ , protect from moisture. No Storage stability

direct sun exposure. The product should be stay at ambient temperature (paint

shop) 12h before use.

recommended 60-90µm

Coating film

tested in lab conditions on: chromated aluminium panel 0,8 mm AlMg1

Thickness

ISO 2808

visual satin matt Gloss

**Cross cut** ISO 2409

Mandrel bending

ISO 1519

<5 mm

0

**Erichsen cupping** 

ISO 1520

>5 mm

Impact resistance

ISO 6272-1

front >50 kg/cm reverse >50 kg/cm

**Buchholz hardness** 

ISO 28151

n/d

Pencil hardness

ISO 151841

n/d

chromated aluminium panel

0,8 mm AIMg1

Salt spray test

ISO 9227

1000 h no bubble

Accelerated weathering test (UVB-313)

ISO 16474-3

(1) not applicable structural coatings film

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300 h, gloss retention >=50%



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#### Surface pretreatment

- The overall quality of the coating film depends on the type and quality of the pretreatment.
- Surfaces must be dry, degreased and free from rust and other contaminants.
- In order to improve coating adhesion to the surface and improve resistance it is recommended: aluminium - chromating, chrome-free pretreatment or anodic pretreatment. steel and galvanized steel - individual choice of surface pretreatment (e.g. phosphating).
- However, in order to achieve optimum results, you must follow the instructions and recommendations of the pretreatment material manufacturer.

# Application

- Electrostatic gun corona (recommended voltage 60 kV) or tribo gun.
- Application parameters depend on the geometric shapes of the detail and the film thickness to be reached.
- Responsibility for the correct application parameters lies on the coating applicators.
- Despite careful production methods, slight deviation of color and effect between the different manufacturing batches may occur (typical for powder coatings).
- Various application parameters may cause color/effect changes.
- Proper grounding of application equipment and coated elements helps to keep repeatability of the obtained color/effect.
- It is recommended to do the entire order on the same equipment, with the same application parameters and using powder coating from one production batch.
- Not be mixed with other powder coatings.
- Control the air speed during application of powder coatings.
- Keep the appropriate distance: the gun coated elements.
- Keep a uniform thickness of coating.

## **Curing conditions**

- Curing time recommendation in a convection oven:

#### 180°C/10min.

(object temperature)

The parameters for optimal curing of the coating are as follows: Object temperature [°C] minimal [min.] maximal [min.]

> 190 8 12 180 10 20

- Must be strictly observed parameters of stoving the coating film to ensure that the full mechanical and chemical properties.
- Suitability of the product for stoving in gas ovens and radiant ovens should be verified may be a significant difference in color - perform a comparative test with the standard color (please contact us for details).

# **Approvals**

# - QUALICOAT P-1925, Class 1, Gloss category 1.

- "Product approved by QUALICOAT. QUALICOAT is a quality label for licensed coaters".
- The powder coatings are in compliance with 2011/65/EC and 2015/863/EC (so called ROHS).
- Heavy metal and TGiC free.

## Technical recommendations

- In the case of cleaning powder coated surfaces it is necessary strict compliance with the Technical recommendations 01: Cleaning of powder coated surfaces.

## Comments

- To print, to glue, to label, to laminate with foil, over-coating or any other post-treatment, some preliminary testing is recommended.
- Powder-coated details should be packaged after being completely cooled down to ambient temperature, into appropriate packaging materials previously tested by the user.
- Packaged details should be stored under cover to avoid condensation, which may result in traces on the finished coating.

## Safety Data Sheet

POLYESTER POWDER COATINGS PF - TI

Edition / date

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The above values may vary depending on the type of surface pretreament, color, gloss, texture, etc.

All informations included in this card are based on our experience and actual knowlegde and do not release the user from carrying out their own tests. If in doubt please contact us for details. Having no influence on the use and application conditions, we can take responsibility only for the quality of any the product and ensure that it fits to our standards. This Technical Data Sheet is revised periodically. EKO-COLOR reserves the right to change specifications without notice.

If necessary, our sales department will confirm the validity of this document.



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