# Reflect Powder PE 5988

**Efficient low-cure-temperature mixed coating powder as decorative coating for interior use**


## Field of application

As a interior and exterior coating for lamps meeting the highest qualitative and optical demands, especially in order to attain the greatest possible luminous efficacy.

## Properties

- particularly economical curing conditions
- good corrosion protection
- good chemical resistance
- high surface hardness
- good to very good mechanical parameters
- very good adhesion on all common metallic substrates, as well as partly plastics, glass and ceramics
- after full curing / cross-linking, the paint film is physiologically safe

## Technical Data

| | |
|---|---|
| **Basis** | Polyester resin |
| **Color** | Luminous white |
| **Degree of gloss** | silk matt, 20 to 30 units/60°<br>(in accordance with DIN EN ISO 2813) |
| **Density** | 1.52 to 1.58 g/cm³ (in accordance with DIN ISO 8130-2) |
| **Theoretical coverage** | approx. 835 m²/kg (with 1 µm dry film thickness) |
| **Grain distribution** | < 19 % < 10 µm<br>52 % < 32 µm<br>> 88 % < 90 µm<br>(laser measuring) |
| **Cross-cut test** | Gt 0 C (in accordance with DIN EN ISO 2409) |
| **Erichsen cupping** | ≥ 6 mm (in accordance with DIN EN ISO 1520) |
| **Buchholz hardness** | ≥ 90 (in accordance with DIN EN ISO 2815) |
| **Pencil hardness** | 2H (Wolff Wilborn Type 291) |

## Technical Data

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|---|---|
| **Salt spray test** | Delamination at the scribe ≤ 2 mm (in accordance with DIN EN ISO 4628-8), On iron-phosphated steel ≥ 1.000 h (in accordance with DIN EN ISO 9227-NSS) |
| **Condensation water test** | Degree of blistering 0 (S0) (in accordance with DIN EN ISO 4628-2) On iron-phosphated steel ≥ 1.000 h (in accordance with DIN EN ISO 6270-2) |
| **Accelerated weathering QUV-B/SE** | After 200 h residual gloss ≥ 50 % of initial gloss (in accordance with DIN EN ISO 16474-3) |
| **Impact test** | reverse: ≥ 10 ip<br>direct: ≥ 20 ip<br>(in accordance with ASTM D 2794-69) |
| **Labeling** | See current safety data sheet. |

## Coating suggestion

| **Substrates** [1)] | **Prime coat** | **Top coat**[2)] |
|---|---|---|
| **Aluminium**<br>preferably yellow- or green-chromated (in accordance with DIN EN 12487) or chromium-free no-rinse pretreatment<br><br>**Steel**<br>preferably iron or zinc-phosphated<br><br>**Cast iron**<br>**Galvanized steel**<br>**etc.** | Corro Protect EP 5816<br>(light gray)<br>60 to 80 µm | Reflect Powder PE 5988<br>80 to 100 µm |

1) Generally, the substrate shall be free from grease, oil, separating and drawing agents as well as corrosion products and other impurities (that especially applies to the use of directly fired gasovens ) and pretreated according to the corrosion protection requirements.

2) Or single layer, provided that substrate has been pretreated accordingly.

## Process

| | |
|---|---|
| **Compatibility** | Different batches or powder coat qualities cannot always be mixed / are not always compatible to one another. Surface defects such as gloss reduction, specks, crater, orange peel effect, etc., may result from incompatibility. To be sure, appropriate tests shall be carried out before application. |
| **Application temperature** | 15 to 25 °C |
| **Humidity** | < 75 % relative humidity |

## Application

Generally, make sure the substrate is grounded properly. The fluidizing, conveying and dosing air must be free from oil and condensation water. In order to obtain a uniform coating quality, a constant fresh / recovered powder ratio should be maintained. The recovery powder portion in the circulation system should normally be less than 35 %.

## Application

**Corona application**

Using appropriate coating programs depending on the parts' geometry and application situation (if applicable, using the current flow restriction).
For application systems without current flow restriction:
Voltage:
70 to 100 kV (for the first coating)
40 to 50 kV (for overcoating)

**Tribo application**

is possible

## Curing conditions

| Duration | Object temperature |
|---|---|
| 15 to 35 min. | at 170°C |
| 10 to 25 min. | at 180°C |
| 8 to 20 min. | at 190°C |
| 5 to 15 min. | at 200°C |

## Container sizes

20 kg, 500 kg (25 polyethylene bags of 20 kg each)
Further container sizes available on request.

## Shelf life

12 months after receipt.
Store in a sealed container in a dry place and at room temperature (at most 25 °C). Protect from heat sources and direct sunlight.

**Minimum shelf life**

Refer to label

## Remark

This Technical Data Sheet is based on intense development work and many years of practical experience. The contents do not constitute any contractual relationship. The user/buyer is not released from his/her obligation to test our products for suitability for the intended application. In addition, our General Terms and Conditions shall apply. As soon as a new edition of this Technical Data Sheet is issued, the previous specifications become invalid. If you need the current version, please contact your Brillux consultant, Version 3.

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