

Premium Polyester Powder 5935

Highly weather resistant coarse-texture coating powder for exterior use in extreme climatic conditions

Basis

Polyester resin

Colors

Due to the limited availability of weather-proof pigments, the product range only includes a limited number of different tints.

Gloss grade

Silk matt

Properties

- very high weather resistance
- very high gloss and color stability
- very good adhesion on all common metallic substrates
- very good corrosion protection
- high degree of surface hardness
- good mechanical parameters
- good chemical resistance
- covers uneven areas and substrate defects
- limited adhesion of wet paints, screen printing inks, glues, sealants, etc. For this reason, proper adhesion must be verified in each specific case before application.
- once fully cured, the paint film is physiologically safe

Field of application

For exterior and interior coatings with high demands on quality and optical characteristics, e.g. for vending machines, mailboxes, lamps, leisure equipment, garden furniture and equipment etc.

Technical data

Density

1.45 to 1.70 g/cm³¹
(in accordance with DIN ISO 8130-2)

Theoretical coverage

approx. 635 m²/kg¹
(with 1 µm dry film thickness)

Grain distribution

< 11 %	< 10 µm
35 to 50 %	< 32 µm
> 85 %	< 90 µm

(laser measuring instrument)

Cross-hatch test

Gt 0 C
(in accordance with DIN EN ISO 2409)

Erichsen cupping test

≥ 3 mm (tapetest)
(in accordance with DIN EN ISO 1520)

Salt spray test

delamination at scribe ≤ 1 mm
(in accordance with DIN EN ISO 4628-8) on aluminium substrate²
> 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 aluminium substrate²
> 1.000 h
(in accordance with DIN EN ISO 6270-2)

Accelerated weathering

QUV-B/SE

after 600 h residual gloss ≥ 50 % of initial gloss³
(in accordance with DIN EN ISO 16474-3)

Impact test

reverse: ≥ 10 ip (tapetest)
direct: ≥ 20 ip (tapetest)
(in accordance with ASTM D 2794-69)

Labelling

See current safety data sheet.

¹ depending on color

² on chromated aluminium bonder panel

³ Please note for coarse-textured powder coatings that the determination of gloss has to be carried out also visually, due to the fact that the measured gloss-values depend on the characteristic of the texture.

Coating recommendation

Substrates ¹	Prime coat	Top coat
<p>Aluminum/ galvanized steel preferably yellow- or green- chromated (in accordance with DIN EN 12487)</p> <p>Steel Sand-blasted (degree of purity at least SA 2 1/2 in accordance with DIN EN ISO 12944, part 4) or zinc-phosphated</p>	<p><u>Aluminum</u> normally not necessary</p> <p><u>Galvanized steel</u>² Corro Protect EP 5816 Light-gray 60 to 80 µm</p> <p><u>Steel</u>² Zinc Prime Powder EP 5815 dark-gray 60 to 80 µm</p>	<p>Premium Polyester Powder 5935 approx. 80 µm³</p>

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

Air humidity

< 75 % r. h.

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 %. Please also note our Technical Information "Textured coating powders – Important hints for the use of textured coating powders". When processing metallic powder coats, special processing instructions must be followed. Also refer to "Processing Instructions for Brillux Metallic - Powder Coats".

Corona application

voltage:
70 to 100 kV
(in the case of first coat)
40 to 50 kV
(in the case of overcoating)

Tribo application
possible

Curing conditions

duration: object temperature:
25 to 40 min. at 170 °C
20 to 35 min. at 180 °C
15 to 30 min. at 190 °C
10 to 25 min. at 200 °C

¹ Generally, the substrate should 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 pre-treated according to the corrosion protection requirements.

² At reduced demands on corrosion protection the prime coat is not always necessary.

³ depending on color

Packaging

20 kg, 500 kg (25 x 20 kg)
Further container sizes available
upon request.

Shelf life

6 month after receipt.
Store in closed container, dry and at
room temperature (max. 25 °C).
Protect against heat and direct
sunlight.

Remarks

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on intense development work and
many years of practical experience.
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As soon as a new edition of this
Technical Data Sheet is issued, the
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invalid.

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Version 4