

Technical Data Sheet

Universal Polyester Powder 5917

Universal-use, silk-matt coating powder without circulation stability.

Basis

Polyester resin

Colors

All colors according to RAL. Further colors and special metallic effects upon request.

Depending on the relevant process, color deviations are possible. Prechecking by the user is required.

Gloss grade

Silk-matt, 25 to 35 GU/60° (in accordance with DIN EN ISO 2813)

Properties

- very good weather resistance
- very high gloss and color stability
- good corrosion protection
- high degree of surface hardness
- good mechanical values
- very good flow properties
- very good adhesion on all common metallic substrates
- not circulation stable
- due to the material-specific properties, film thicknesses
 > 100 μm are required
- once fully cured, the paint film is physiologically safe

Field of application

Interior and exterior coatings meeting the highest qualitative and optical demands, e.g. construction machines, fence systems, fire-proof doors, garden furniture, sound insulation walls, hospital beds, lights, cash boxes, safes, vending machines etc.

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Density

1.45 to 1.65 g/ml¹⁾ (in accordance with DIN ISO 8130-2)

Theoretical coverage

approx. 645 m²/kg ¹⁾ (with 1 µm)

Grain distribution

< 11 % < 10 µm 35–50 % < 32 µm > 85 % < 90 µm (laser measuring instrument)

Cross-hatch

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

Erichsen cupping test

≥ 5 mm (in accordance with DIN EN ISO 1520)

Buchholz hardness

 \geq 80 (in accordance with DIN EN ISO 2815)

Pencil hardness

2 H (Wolff Wilborn Type 291)

Salt spray test

> 1.000 h ²⁾ (in accordance with DIN EN ISO 9227-NSS)

Condensation water test

> 1.000 h²⁾
(in accordance with
DIN EN ISO 6270-2)

Accelerated weathering QUV-B/SE

after 300 h residual gloss ≥ 50 % of initial gloss (in accordance with DIN EN ISO 11507)

Labelling

See current safety data sheet

1) depending on color

2) on chromated aluminium substrate



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Coating recommendation

Substrates ¹⁾	Prime coat ²⁾	Top coat ³⁾
Aluminim preferably yellow- or green-chromated (according to DIN 50939) or chromium-free no-rinse pretreatment Steel preferably iron or zinc- phosphated	Corro-Protect EP 5816 Light grey 60 to 80 µm	Universal Polyester Powder 5917 100 to 120 μm ⁴⁾
Cast iron		
Galvanized steel etc.		

1) Generally, the substrate shall be free from grease, oil, separating and drawing agents as well as corrosion products and other impurities, and pretreated according to the corrosion protection requirements.

2) In order to obtain an optimum adhesion in the case of a double-layer coating system in the powder area, the powder primer may only be precured. An object temperature of 110–130°C is recommended for this at a holding time of 8 to 10 minutes. If the prime coat is fully cured, adhesion problems may occur.

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

4) depending on color

Process

Compatibility

Different batches or coating powders cannot always be mixed and are not always compatible to one another. Surface defects such as gloss reduction, specks, crater, orange peel effect, etc., may result from incompatibility.

To avoid a separation of the texture giving ingredients, we suggest the application with a fluidized container. If no fluid container is available, it must be examined whether processing directly from the box with activated vibration function is possible.

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.

Corona application

Depending on geometry of parts and application use corresponding coating-programs (as the case may be with utilisation of limitation of spraying current)

For application-systems without limitation of spraying current: voltage: 70 to 100 kV (in the case of first coat) 40 to 50 KV (in the case of overcoating)

Tribo application not possible

Curing conditions

duration:	object
	temperature:
15 to 35 min.	at 180 °C
12 to 25 min.	at 190 °C
10 to 15 min.	at 200 °C



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Packaging

20 kg

Storage

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

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 5

Brillux Industrial Coatings Otto-Hahn-Str. 14 59423 Unna Germany Phone +49 (0)2303 8805-0 Fax +49 (0)2303 8805-119 www.brillux-industrial-coatings.com info@brillux-industrial-coatings.com