

Universal Polyester Powder 5919

**Universal-use, coarse-texture coating powder
without circulation stability
silk gloss**

Basis

Polyester resin

Colors

All common color systems according to RAL Classic. Further colors available upon request.

Gloss grade

Silk gloss

Properties

- very good weather resistance
- very high gloss and color stability
- very good adhesion on all common metallic substrates
- high degree of surface hardness
- good mechanical parameters
- degassing-stable
- covers uneven areas and substrate defects
- not circulation stable
- processing only via separate no-recovery cabin and thorough cleaning, otherwise risk of contamination is possible
- after full curing / cross-linking, 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, fire extinguishers, garden furniture, sound insulation walls, hospital beds, lamps, cash boxes, safes, automatic machines etc.

Technical data

Density

1.40 to 1.70 g/cm³ ¹⁾
(in accordance with DIN ISO 8130-2)

Theor. 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

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

Salt spray test

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

Condensation water test

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

Accelerated weathering QUV-B/SE

after 300 h residual gloss ≥ 50 % of initial gloss ³⁾
(in accordance with DIN EN ISO 11507)

Impact test

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

Labelling

See current safety data sheet.

- 1) depending on color
- 2) on chromated aluminium substrate
- 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 ²⁾	Top coat ³⁾
Aluminum preferably yellow- or green-chromated (in accordance with DIN EN 12487) or chromium-free no-rinse pretreatment Steel preferably iron or zinc-phosphated Cast iron Galvanized steel etc.	Corro-Protect EP 5816 Light gray 60 to 80 µm	Universal Polyester Powder 5919 70 to 90 µm ⁴⁾

- 1) Generally, the substrate must 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) When using a direct fired gas oven the adhesion between the two powder layers has to be checked in a representative pilot test. Due to loaded burning residues on the primer layer the inter-coat adhesion to the top coat may be reduced.
- 3) or single layer, provided that substrate has been pretreated accordingly
- 4) depending on color

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.

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:
20 to 30 min. at 170 °C
12 to 25 min. at 185 °C
8 to 20 min. at 200 °C

This quality is suitable for directly heated gas furnaces.

Packaging

20 kg

Storage

1 year after receipt.

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

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 7

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