

Universal Polyester Powder 5918

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

Basis

Polyester resin

Colors

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

Gloss grade

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 at good mechanical parameters
- good screen printing properties
- 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)

Theoretical coverage

approx. 645 m²/kg ¹⁾
(with 1 µm dry film thickness)

Grain distribution

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

(laser measuring instrument)

Cross-cut test

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

Erichsen cupping

≥ 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 5918 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

12 month after receipt.
Store in original 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 prac-
tical 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

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