

Clear-Powder Coat Type F 5900.-.0016

**Polyester quality for interior and exterior use
transparent, glossy**

Basis

polyurethan

Colours

bluish-transparent

Gloss grade

glossy

Properties

- slight colour shift ¹⁾
- very good weather resistance²⁾
- high gloss and colour stability²⁾
- little inclination to craze cracking
- very good adhesion on all common metallic substrates
- high surface hardness at good mechanical parameters
- very good levelling property
- after full curing / cross-linking, the paint film is physiologically safe

¹⁾ In the case of a double-layer coating system the tint has to be tested firstly.

²⁾ When painting over bright colours, yellowing may occur in the case of high UV impact.

Field of application

Interior and exterior coatings meeting the highest qualitative and optical demands, e.g. agricultural machines, fence systems, garage doors, gas cylinders, lawnmowers, fire extinguishers, garden furniture, sound insulation walls, hospital beds, shower stalls, light fixtures etc.

Technical data

Density

1,20 ± 0,03 g/ml
(according to DIN ISO 8130-2)

Theor. coverage

approx. 13,9 m²/kg
(with 60 µm)

Grain distribution

< 12 %	< 10 µm
42 ± 1 %	< 32 µm
> 94 %	< 90 µm

(laser measuring instrument)

Cross-hatch

Gt 0 C (according to DIN EN ISO 2409)

Erichsen cupping test

≥ 5 mm (according to DIN EN ISO 1520)

Buchholz hardness

≥ 80 (according to DIN EN ISO 2815)

Pencil hardness

2 H (Wolf Wilborn Type 291)

Salt spray test

> 250 h ¹⁾
(according to DIN 50021-SS)

Condensation water test

> 250 h ¹⁾ (according to DIN EN ISO 6270-2)

Accelerated weathering QUV-A

> 1.000 h (according to DIN EN ISO 11507)

Impact test

reverse: ≥ 40 ip
direct: ≥ 40 ip
(according to ASTM D 2794-69)

Labelling

see current safety data sheet

¹⁾ In combination with suitable primers (see coating suggestion), the values for salt spray and condensation water tests increase to > 1.000 h.

Coating recommendation

Substrates ¹⁾	Prime coat ²⁾	Top coat ³⁾
Aluminium preferably yellow- or green-chromated (according to DIN 50939) or chromium-free no-rinse pretreatment Steel preferably iron or zinc-phosphated Cast iron Galvanized steel etc.	Powder Coat Type FGG 5910 60 to 80 µm	Clear-Powder Coat Type F 5900.-.0016 50 to 60 µm

- 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.
When painting over metallic colours a try should be done in advance.
- 3) 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

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 %.

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:
10 min. at 200 °C
20 min. at 180 °C

Packaging

16 kg single cardboard box

Storage

1 year after receipt.

Store in closed container, dry
and at room temperature.

Protect against heat and direct
sun impact.

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 its obligation
to test our products for suitability
for the intended application. In
addition to that, our General
Terms and Conditions shall
apply.

As soon as a new edition of this
Technical Data Sheet is issued,
the previous specifications will
become invalid.

If you need the current version,
please consult your Brillux
contact.

Version 1

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