

Superhybrid Powder EP/AC

5850 gloss

5851 silk matt to silk gloss

Superhybrid quality with optimized UV resistance compared to standard mixed powder coating systems

Basis

A combination of polyester- and epoxy resin, modified

Colors

5850: all common color systems
5851: upon request

Gloss grade

5850 gloss,
> 70 GU/60°
5851 silk matt to silk gloss,
16 to 70 GU/60°
(in accordance with
DIN EN ISO 2813)
The measured reflectometer
value may deviate in the case of
metallic colors.

Properties

- very good adhesion on all common metallic substrates
- excellent chemical resistance
- very high degree of surface hardness with good mechanical values
- very good resistance to disinfectant cleaning agents
- optimized UV resistance compared to standard mixed powder-coating-systems
- once fully cured, the paint film is physiologically safe

Field of application

As a decorative interior coating on e.g. steel furniture, racks, light frames, wire goods, tool-boxes, interior doors, fire extinguishers, computer housing, machine parts, furniture fittings, shop design, transport trolley, microwave ovens, laboratory attachment, hospital furniture, medicinal demand, etc.

In the case of secondary equipment, limited exterior use is possible.

Approvals / Permits

Test and approval about the physiological safety, sort 5850
Institut für Lackprüfung, Gießen,
Prüfbericht Nr.: 12-12-99 A+B

Technical data

Density

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

Theoretical coverage

approx. 635 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

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

Buchholz hardness

≥ 90 (in accordance with DIN EN
ISO 2815)

Pencil hardness

2 H (Wolff Wilborn Type 291)

Salt spray test

> 250 h
(in accordance with
DIN 9227-NSS)

Condensation water test

> 250 h
(in accordance with
DIN EN ISO 6270-2)

Accelerated weathering Xenon

after 500 h residual gloss ≥ 50 %
of initial gloss
(in accordance with
DIN EN ISO 11341)

Impact test

reverse: ≥ 5 ip
direct: ≥ 10 ip
(in accordance with
ASTM D 2794-69)

Labeling

See current safety data sheet.

¹⁾ depending on color

Coating recommendation

Substrates ¹⁾	Prime coat	Top coat ²⁾
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.	n/a	Superhybrid Powder EP/AC 5850, 5851 60 to 100 µm

- 1) Generally, the substrate shall 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) For the above applications, generally single-coat application on appropriately pre-treated substrate.

Process

Compatibility

Different batches or powder coat qualities 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 %. 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 temp.:
25 to 40 min. at 190 °C
15 to 25 min. at 200 °C

Packaging

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

Storage

1 year 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 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 2

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