Technical Data Sheet

Mixed Powder EP/PE 5844

Fine texture mixed coating powder as a decorative all-round coating for simple interior applications, dull matt to silk matt



Field of application

Interior and exterior coatings meeting the highest qualitative and optical demands, e.g. lamps, automatic machines, boxes, cash boxes, printer for extract of account, car accessories, roof porter, switch cabinets etc. For subordinate parts a limited outdoor use is possible.

Properties

- good corrosion protection
- good chemical resistance
- high degree of surface hardness
- very good mechanical values
- covers uneven areas and substrate defects
- after corresponding pre-treatment suitable for all common metal substrate as well as partly ceramics
- once fully cured the paint film is physiologically safe

Technical Data

Basis A combination of polyester- and epoxy resin

Color All common color systems

Degree of gloss Dull matt to silk matt

≤ 35 GU/60° (in accordance with DIN EN ISO 2813)

Date: 07.06.2019

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

Theoretical coverage approx. 635 m²/kg ¹⁾ (with 1 µm dry film thickness)

Grain distribution < 11 % $< 10 \mu m$

35 to 50 % < $32 \mu \text{m}$ > 85 % < $90 \mu \text{m}$ (laser measuring)

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Cross-hatch test Gt 0 C (in accordance with DIN EN ISO 2409)

Erichsen cupping ≥ 4 mm (in accordance with DIN EN ISO 1520)

1) depending on color



Technical Data

Salt spray test Delamination at the scribe ≤ 2 mm (in accordance with DIN EN ISO

4628-8), On iron-phosphated steel > 250 h (in accordance with DIN EN

ISO 9227-NSS)

Condensation water test Degree of blistering 0 (S0) (in accordance with DIN EN ISO 4628-2)

On iron-phosphated steel > 250 h (in accordance with DIN EN ISO

6270-2)

Impact test reverse: ≥ 20 ip

direct: ≥ 40 ip

(in accordance with ASTM D 2794-69)

Labeling See current safety data sheet.

Coating suggestion

Substrates 2)	Prime coat	Top coat ³⁾
Aluminium preferably yellow- or green- chromated (according to DIN EN 12487) or chromium-free no-rinse pretreatment Steel preferably iron or zinc-phosphated Galvanized steel Suitably passivated or swept	n/a	Mixed Powder EP/PE 5844 60 to 80 µm

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 gas ovens) and pretreated according to the corrosion protection requirements.

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

Process

Compatibility Different batches

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

Humidity < 75 % relative humidity



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 %. Please note our Technical Information "Textured coating powders — Important information on use of textured coating powders". When processing metallic powder coats, special processing instructions must be followed. Also refer to "Processing Instructions for Brillux Metallic - Powder Coats".

Corona application

Using appropriate coating programs depending on the parts' geometry and application situation (if applicable, using the current flow restriction). For application systems without current flow restriction:

Voltage

70 to 100 KV (for the first coating) 40 to 50 KV (for overcoating)

Tribo application

possible

Curing conditions

Duration	Object temperature
20 to 50 min.	at 170 °C
12 to 30 min.	at 180 °C
10 to 20 min.	at 190 °C
8 to 15 min.	at 200 °C

Container sizes

20 kg, 500 kg (25 polyethylene bags of 20 kg each) Further container sizes available on request.

Shelf life

24 months for solid colors, 12 month for glazes and effect colors after receipt.

Store in a sealed container in a dry place and at room temperature (at most 25 °C). Protect from heat sources and direct sunlight.

Minimum shelf life

Refer to label

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.

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