

Epoxy Powder EP

5833 silk gloss to gloss
5835 dull matt to silk matt

Powder coat on epoxy basis with coarse texture appearance for interior use

Basis

Epoxy resin

Colors

Available on request

Gloss grade

5833 silk gloss to gloss
5835 dull matt to silk matt

Properties

- very good corrosion protection properties
- excellent resistance to chemicals
- very good adhesion on all common metallic substrates
- high surface hardness at good to very good mechanical parameters
- covers up uneven surfaces and substrate faults
- after full curing/cross-linking, the paint film is physiologically safe

Field of application

For many areas, with the highest demands on corrosion protection properties and / or chemical resistance e.g. laboratory attachment, machine parts, furniture fittings, brake lines etc.

Not suitable for exterior use.

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 to 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

> 250 h ²⁾
(in accordance with DIN EN ISO 9227-NSS)

Condensation water test

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

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 iron phosphated Bonder-panel

Coating recommendation

Substrates ¹⁾	Prime coat	Top coat ²⁾
<p>Aluminum preferably yellow- or green-chromated (in accordance with DIN EN 12487) or chromium-free no-rinse pretreatment</p> <p>Steel preferably iron or zinc-phosphated</p> <p>Cast iron</p> <p>Galvanized steel etc.</p>	n/a	<p>Epoypowder EP 5833, 5835 80 - 100 µm</p>

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 pre-treated according to the corrosion protection requirements.

2) For the above applications, generally single-coat application on appropriately pretreated substrate.

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 %. 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

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

possible

Curing conditions

duration: object temperature:

25 to 45 min. at 170 °C

13 to 25 min. at 180 °C

8 to 13 min. at 190 °C

Epoxy resin based systems show a relatively strong sensitivity to thermal yellowing. This applies in particular for use in directly heated gas ovens. Therefore, a careful test must be performed on fitness in advance.

Packaging

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

Storage

6 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
practical experience. The
contents do not constitute any
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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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