Brillux Industrial Coatings

Technical Data Sheet

NT Epoxy Powder EP 5880

Efficient low cure temperature coating powder with an epoxy base for interior use only gloss

Basis
Epoxy resin

Colors
All common color systems

Gloss grade
Gloss,> 90 GU/60°
(in accordance with
DIN EN ISO 2813)

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
- 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, wire products, air brake system pipes, cast tubes motors- and gearbox parts, cooler, brake pads, clips, drive shaft, seat frame 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
≥ 6 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
> 500 h
(in accordance with
DIN EN ISO 9227-SS)

Condensation water test
> 500 h
(in accordance with
DIN EN ISO 6270-2)

Impact test
reverse: ≥ 20 ip
direct: ≥ 40 ip
(in accordance with
ASTM D 2794-69)

Labelling
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 pre-treatment **Steel** preferably iron or zinc-phosphated **Cast iron** **Galvanized steel** **etc.**	n/a	NT Epoxy Powder EP 5880 approx. 80 µm

1) Generally, the substrate shall be free from grease, oil, separating and drawing agents as well as corrosion products and other impurities (this 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 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 %. 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:
15 to 40 min.	at 120 °C
10 to 30 min.	at 130 °C
5 to 15 min.	at 140 °C

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

Storage
3 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 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 4

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