

# **Technical Data Sheet**

## NT Eco Mixed Powder EP/PE 5673

Particularly efficient low-cure-temperature thinlayer coating powder with coarse-texture as a decorative coating for interior use only silk gloss to gloss

## Basis

Combination of polyester- and epoxy resin

## Colors

On request

## **Gloss grade**

silk-glossy to glossy

## **Properties**

- very good adhesion on all common metallic substrates
- high degree of surface hardness at good to very good mechanical parameters
- covers up uneven surfaces and substrate faults
- enables material saving thanks to thin covering layer thicknesses (≥ 50µm<sup>1</sup>)
- good corrosion protection
- once fully cured, the paint film is physiologically safe

## **Field of application**

As a decorative interior coating on e.g. steel furniture, shelving, light frames, wire goods, toolboxes, interior doors, fire extinguishers, machine parts, furniture fittings, shop design, etc.

## Approvals/permits

BAM-certificate about decontaminability of surfaces for NT Eco Mixed Powder EP/PE 5673 in color light gray (art.-no. 5673.-.7035) in accordance with DIN 25415, part 1

## **Technical data**

#### Density

1.4 to 1.8 g/cm<sup>3 1)</sup> (in accordance with DIN ISO 8130-2)

## Theoretical coverage

approx. 625 m<sup>2</sup>/kg <sup>1)</sup> (at 1µm dry film thickness)

#### **Grain distribution**

< 14 % < 10 µm 40 to 60 % < 32 µm > 90 % < 90 µm (laser measuring instrument)

#### **Cross-cut test**

Gt 0 C (in accordance with DIN EN ISO 2409)

#### Erichsen cupping

 $\geq$  3.5 mm<sup>2)</sup> (in accordance with DIN EN ISO 1520)

#### Salt spray test

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

#### **Condensation water test**

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

#### Impact test

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

#### Labelling

See current safety data sheet

- <sup>1)</sup> depending on color
- <sup>2)</sup> on iron phosphated Bonder-panel



## **Coating recommendation**

Substrates <sup>1)</sup>	Prime coat	Top coat <sup>2)</sup>
Aluminum preferably yellow- or green-chromated (in accordance with DIN EN 12487) or chromium-free no-rinse pre-treatment	n/a	NT Eco Mixed Powder EP/PE 5673 ≥ 50 µm <sup>3)</sup>
<b>Steel</b> preferably iron or zinc- phosphated		
Cast iron		
Galvanized steel etc.		

<sup>1)</sup> 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.

<sup>2)</sup> For the above pre-treated substrates one coating should be applied.

<sup>3)</sup> depending on color

## 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: 30 to 60 min. at 140 °C 15 to 40 min. at 150 °C 10 to 30 min. at 160 °C 7 to 20 min. at 170 °C 5 to 15 min. at 180 °C

### Packaging

20 kg, 500 kg (25 x 20 kg) Further container sizes 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 sun impact.



## **Technical Data Sheet**

## 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 3

Brillux Industrial Coatings Otto-Hahn-Str. 14 59423 Unna Germany Phone +49 (0)2303 8805-0 Fax +49 (0)2303 8805-119 www.brillux-industrial-coatings.com info@brillux-industrial-coatings.com