

Super NT Polyester Powder

5920 gloss
5921 silk gloss
5922 silk matt

Very efficient low cure temperature coating powder with curing conditions starting from 150 °C (5922 starting from 160 °C), for both interior and exterior use in three gloss grades

Basis

Polyester resin

Colors

All common color systems

Gloss grade

5920 gloss,
> 70 GU/60°
5921 silk gloss,
60 to 70 GU/60°
5922 silk matt,
20 to 35 GU/60°
(in accordance with
DIN EN ISO 2813)

Properties

- very efficient curing conditions with an object temperature starting from 150 °C (5922 starting from 160 °C)
- very good weather resistance
- high gloss and color stability
- very good adhesion on all common metallic substrates
- good corrosion protection
- high surface hardness at good mechanical values
- excellent abrasion resistance
- once fully cured, the paint film is physiologically safe

Field of application

Interior and exterior coatings meeting the highest qualitative and optical demands, e.g. agricultural machines, fence systems, garage doors, gas cylinders, lawnmowers, fire extinguishers, garden furniture, sound insulation walls, hospital beds, shower stalls, light fixtures etc.

Technical data

Density

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

Theoretical coverage

approx. 645 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

≥ 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 ²⁾
(in accordance with
DIN EN ISO 9227-NSS)

Condensation water test

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

Accelerated weathering QUV-B/SE

after 250 h residual gloss
≥ 50 % of initial gloss
(in accordance with
DIN EN ISO 11507)

Impact test

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

Labelling

See current safety data sheet.

1) depending on color

2) on iron phosphated and chromium-free passivated 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 ironphosphated (chromate VI-free passivated) or zinc-phosphated</p> <p>Cast iron</p> <p>Galvanized steel etc.</p>	n/a	<p>Super NT Polyester Powder 5920, 5921, 5922 60 to 80 µm ³⁾</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 pretreated according to the corrosion protection requirements.
 2) If the substrate has been pretreated accordingly.
 3) 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 %. 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:

5920/5921:
 12 to 35 min. at 150 °C
 8 to 25 min. at 160 °C
 5 to 20 min. at 170 °C
 3 to 16 min. at 180 °C

5922:
 10 to 40 min. at 160 °C
 8 to 25 min. at 170 °C
 6 to 15 min. at 180 °C
 4 to 10 min. at 190 °C

Packaging

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

Storage

6 month after receipt.
Store in original closed contain-
er, dry and at room temperature
(max. 25 °C). Protect against
heat and direct sunlight.

Remark

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based on intense development
work and many years of practi-
cal experience. The contents do
not constitute any contractual re-
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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 be-
come invalid.

If you need the current version,
please contact your Brillux con-
sultant.

Version 6

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