

Technical Data Sheet

Super NT Polyester Powder 5924

Very efficient low cure temperature coating powder with fine texture appearance and curing conditions starting from 150 °C for both interior and exterior use



Field of application

Interior and exterior coatings meeting the highest qualitative and optical demands, e.g. lamps, automatic machines, boxes, cash boxes, car accessories, switch cabinets etc.

Properties

- Very efficient curing conditions
- good weather resistance
- high gloss and color stability
- high degree of surface hardness
- good mechanical values
- covers uneven areas and substrate defects
- after corresponding pre-treatment suitable for all common metal substrate
- once fully cured the paint film is physiologically safe

Technical Data

Basis	Polyester resin
Color	All common color systems
Degree of gloss	Dull matt to silk matt, ≤ 35 GU/60° (in accordance with DIN EN ISO 2813)
Density	1.40 to 1.70 g/cm ³ ¹⁾ (in accordance with DIN ISO 8130-2)
Theoretical coverage	approx. 645 m ² /kg ¹⁾ (with 1 µm dry film thickness)
Grain distribution	< 11 % < 10 µm 35 to 50 % < 32 µm > 85 % < 90 µm (laser measuring)
Cross-hatch test	Gt 0 C (in accordance with DIN EN ISO 2409)
Erichsen cupping	≥ 5 mm (in accordance with DIN EN ISO 1520)

¹⁾ depending on color

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Salt spray test	Delamination at the scribe ≤ 2 mm (in accordance with DIN EN ISO 4628-8), On zinc-phosphated steel > 750 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 zinc-phosphated steel > 750 h (in accordance with DIN EN ISO 6270-2)
Accelerated weathering QUV-B/SE	after 200 h: residual gloss ≥ 50 % of initial gloss (according to DIN EN ISO 16474-3)
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 Suitably passivated Steel preferably iron phosphated with suitably passivating or zinc-phosphated Galvanized steel Suitably passivated or swept		Super NT Polyester Powder 592460 to $80 \mu\text{m}$ ⁴⁾

²⁾ 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.

³⁾ If the substrate has been pretreated accordingly.

⁴⁾ 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
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

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
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

Container sizes

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

Shelf life

6 months 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.

Brillux GmbH & Co. KG Industrielack
Otto-Hahn-Straße 14
59423 Unna
Tel. +49 2303 8805-0
Fax +49 2303 8805-119
info@brillux-industrielack.de
www.brillux-industrielack.de