



PURE POLYESTER PE SERIES - POWDER COATING

Product Description:

National Paints PE Series is a thermosetting powder coating based on polyester resins and hardeners. It is developed to satisfy the requirements of exterior durability with attractive decorative finishes. NP PE series offer excellent gloss retention and resistance to color change properties.

National Paints PE Powders are available in a variety of colors as per RAL Card, custom made Shades in Glossy, Semi glossy, and Matt finishes. Other patterns like Grit Finish, Texture, and Hammer Tone & Metallic Finishes are also available.

Application Areas:

National Paints PE Series is recommended for Exterior applications. Typical application areas are Aluminum Industry, Electric Panel Boards, Air conditioner cabinets, Farm equipments, Garden Furniture, Playground item, Automobile Accessories, Architectural items, Light Fixtures, firefighting equipments etc.

Powder Application:

National Paints PE Series can be applied by automatic corona Electrostatic Powder Spray – 40 to 100 KV. Over spray powder can be reclaimed using suitable equipments and recycled through the coating systems.

Pre-treatment:

Substrate should be free of grease, oil, dirt, finger prints, and drawing compounds, remove all contamination and apply surface treatments to get optimum adhesion and coating performance properties. The recommended types of pre-treatments for the most frequently used substrates are:

<i>For Steel</i>	-:	<i>Iron or Zinc Phosphate</i>
<i>For Galvanized Steel</i>	-:	<i>Chromate treatment</i>
<i>For Aluminium</i>	-:	<i>Chromate treatment (DIN 50939)</i>

Powder Properties:

Chemical Type	-:	Pure Polyester – PE Series
Gloss @ 60° (ISO-2813)	-:	PEFG High Gloss - 90 (+/-) 5 PESG Semi-Gloss - 77 (+/-) 7 PESM Matt - 30 (+/-) 5 PECT Course Texture - 20 (+/-) 5 PEFT Fine Texture - 5 (+/-) 5
Particle Size	-:	60% above 32 micron sieve
Specific Gravity	-:	1.2 – 1.6 (Depending upon the color & Finish).
Theoretical Coverage	-:	8 – 13sq. meters/kg (as per Dry Film Thickness, Specific Gravity & Transfer efficiency)
Curing Schedule	-:	200 °C / 10Min & 180 °C / 15Min (metal temp.)
Flow Out	-:	Very Good

Coating Properties:

Cupping Test	(ISO-1520)	-:	5mm Pass (No surface cracking)
Impact Test Direct	(ISO-6272)	-:	50 kg/cm (No surface cracking)
Impact Test Indirect	(ISO-6272)	-:	50 kg/cm (No surface cracking)
Flexibility	(ASTM D 552)	-:	180deg (No surface cracking)
Adhesion	(ISO-2409)	-:	GT – ‘0’
Pencil Hardness	(ASTM D 3363)	-:	H-2H passes (No pencil marks)
Flexibility	(ISO-1519)	-:	5 mm passes (No film cracking)



Corrosion Testing:

NACL 5% Salt Spray (ASTM B117)

After 1000 hours - : No blistering & loss of adhesion;
No undercutting

Acetic Acid Salt Spray (ISO 9227)

After 1000 hours - : Maximum 15mm² permeation
for a scratch of 10cm

Humidity Resistance (ISO 6270-2)

After 1000 hours - : No permeation exceeding 1mm on
both sides of the scratch

Accelerated weathering (ISO 16474)

UVB-313 – 300hours

4hours @ 50°C UV

4hours @ 40°C Condensation

- : No chalking with excellent color stability
and gloss retention

UVA-340 – 1000hours

8hours @ 60°C UV

4hours @ 45°C Condensation

- : No chalking with excellent color stability
and gloss retention

Storage Conditions: Store Powder in a Dry cool condition. Do not exceed 33°C. Keep powder in packed condition if not in use to avoid contamination and moisture. Do not mix with any other Powder.

Deco/Rev01. 03-07-2018

The information in this Data Sheet is the outcome of NP research work and experience. The information contained herein is believed to be accurate but cannot be taken as a formal warranty.

Your World. Our Colors.

صايبك ألواننا

National Paints Factories Co. Ltd.

Tel: +971 6 5130000, Fax: +971 6 5340222

P.O. Box: 5822, Sharjah - U.A.E.

ISO 9001 & 14001
OHSAS 18001
CERTIFIED FACTORY

www.national-paints.com

شركة مصانع الأصباغ الوطنية المحدودة

هاتف: +971 6 5130000، فاكس: +971 6 5340222

ص.ب: 5822، الشارقة - إ.ع.م