

Nerocoat Product Specifications – Polyester Powders.

Substrates

Aluminium
Cold rolled Cold Annealed (CRCA)Steel

Surface Preparation

For normal applications – chemical cleaning and surface treatment.

For Aluminium – Chromatising.
For Steel – Iron Phosphate / Low Wt. Zinc phosphate.

Application Conditions

Application Method:

Electrostatic Powder Spray
- 40 to – 120 KV (Kilovolt)

Film Thickness:

For normal usage 50 – 60 microns.

Curing Schedule:

200°C for 10 to 15 minutes (Object Temp.)

Powder Characteristics

Sieve Analysis:

(By Alpine Air Jet Sieve A 200 L.S.)

Below 32 microns	42 ± 3 %
Below 90 microns	> 99%
Below 125 micron	100 %.

Performance will vary with colour,baking schedule, substrate type and thickness.

The following are typical performance properties when White or Off White Polyester Powder Coatings are applied to chemically cleaned and surface treated light guage metal substrate. We suggest each proposed substrate be tested to confirm acceptability.

Specific Gravity:

1.4 – 1.8 (Depending upon colour).

Theoretical Coverage:

12 Sq.meters per Kg.
At a typical specific gravity of 1.60, and at 50 microns dry film thickness assuming 100% application efficiency.

Storage:

Product has shelf life of 6 months at 25°C and Relative Humidity of 50%. Cooler temperatures and lower humidity are recommended.

Performance Properties

Physical Tests:

Type	Pure Polyester
Colour	In desired shades
Gloss @ 60°	Matt :10 – 30% Semiglossy: 45 – 65% Glossy: 80 – 95%
Finish	Available in Smooth, Texture and Structure finishes.
Hardness (Pencil)	H to 2H
Flexibility	Passes 6.25 mm
Adhesion (cross hatch tape test)	Excellent. GT-0 (1mm squares)
Impact (Direct / Reverse)	150 Kg.cm

Accelerated Tests:

Humidity : 1000Hrs.
No blisters or other failures.

5% Salt Spray : 500 Hrs.
No face rust, 3mm creepage from scribe.
(On CRCA steel, chemically treated)

Water Immrsion : 1000Hrs. @ 33°C in Distilled water.
No blistering or other changes.

Overbake Resistance: Very slight discolouration and no lowering of gloss at 100% overbake.

Exterior Durability : Excellent.

Chemical Resistance Tests:

Conducted under a 5 cm. watch glass for 16 Hrs.
Showed no staining when exposed to :

Alcohol	Ketchup
Ammonia 10%	Lemon Juice
Antifreeze	Lipstick
Battery Acid	Mayonnaise
Bleach	Nail Polish Remover
Detergent 1%	Paint Brush Cleaner
Detergent 5%	Vinegar
Grape Juice	

Typical Applications

Air Conditioner Cabinets, Farm Equipments, Garden Furnitures, Playground Items, Aluminium Extrusions, Automobile Accessories, Architectural Items, Light Fixtures, etc.

The data given herein is meant to serve only as a guide to user. The customers are advised to evaluate the product for their end use. Kansai Nerolac Paints do not assume any responsibility with regard to accuracy or reproducibility of this data as the paint film performance largely depends upon surface preparation and application conditions which may vary from customer to customer and is beyond our control.