



PURE POLYESTER POWDER COATING

Series Credentials Code: 65

PRODUCT INTERPRETATION:

Durable Polyester based powder coatings are thermosetting powder and mainly used for exterior purpose and external application with the excellent outdoor durability and good chemical resistance with very good adhesion properties. Polyester powders are the preferred coatings for architectural materials exposed to outdoor environment that requires gloss retention over long periods. This powders posses excellent flow, finish, toughness and mechanical properties. Neat Koat Speciality Inc.'s attention to particle size control and formulation ensures optimum transfer efficiency.

AREAS OF APPLICATION:

Pure polyester powders are best suited for Aluminum extrusions, aluminum claddings, Door frames, Window panes, Automotive components, Garden furnitures, Bicycles, Modular furniture, sports equipments, fencing, vending, display boards, petrol pump canopies, Air conditioner covers, Radiators, Bumpers and guardrail.

PRODUCT FEATURES:

- ✚ Excellent UV resistance.
- ✚ Good Mechanical Resistance.
- ✚ Excellent Durability.
- ✚ Resistance to discoloration.
- ✚ Good resistance to yellowing.

GENERAL SPECIFICATION:

Chemical Nature	Polyester – TGIC System
Supply Form	Fine powder suitable for all types of electrostatic spray equipment
Colour	Wide range available to all common colour standards and to order.
Particle Size	< 125 um, 100 % Passing
Theoretical Coverage	8 – 10 Sq. meters / Kg. Depending on colour and film thickness.
Specific Gravity	1.2 – 1.7, depending on colour.
Gloss	Full range available from full gloss to matt.
Curing Schedule	180 °C (Object Temperature) for 20 minutes. Or 200 °C (Object Temperature) for 10 minutes.
Aesthetic Alternatives	Textured, structured, metallic versions are also available.
Storage	Cool and dry below 25°C.
Shelf Life	Minimum 6 months from the date of manufacture in a sealed carton under standard conditions of storage <25 °C and RH 60%



PERFORMANCE DATA:

Mechanical Properties:	
Adhesion (Cross Cut – 2mm)	No Loss of Adhesion
Impact Resistance	100 Kgs. / cm Passes
Erichsen Cupping	6 mm
Pencil Hardness	H – 3H Passes
Scratch Hardness	5 Kgs. Passes
Flexibility (Conical Mandrel)	6 mm Passes
Chemical Properties:	
Salt Spray Resistance	500 hrs. Passes
Humidity Resistance	500 hrs. Passes
QUV Exterior Resistance	300 hrs. Passes
Acid Resistance	Passes
Alkali Resistance	Passes
Film Properties:	
Gloss Level @ 60° Gloss Head	For Glossy > 80 to 95 For Semi Glossy 25 to 60 For Matt 10 to 20
Appearance	Smooth and uniform film
Flow / Leveling	Very Good
Colour Retention	Excellent

PRE TREATMENT:

Neat Koat Polyester powders adhere to most metals and do not require primers. For maximum protection, it is essential to pretreat components prior to application. Articles to be coated must be free from rust, grease, oil and mill scale. Solvent vapour degreasing is usually adequate. However, in order to improve corrosion resistance the use of iron phosphate or zinc phosphate is strongly recommended. Aluminum should be pre-treated using a chromate conversion system prior to powder coating.

APPLICATION GUIDELINES:

Neat Koat Polyester powders are suitable for use with all electrostatic powder spraying equipment. The powder is sprayed electrostatically onto earthed metallic substrates and an even layer of powder is deposited. When subjected to the correct temperature, the powder melts and flows to form a continuous film before curing, resulting in a coating with excellent mechanical and chemical resistance properties. It is essential that the compress air is completely filtered to avoid contamination by oil, dust or water. Jigs should be clean in order to maintain good earthing. Through cleaning of the application and recovery systems must be necessary before starting the application.

STORAGE & HANDLING:

- ✓ Store in closed, dry and cool conditions, preferably below 25 °C. Exposure to direct sunlight, heat and high humidity should be avoided.
- ✓ Partly used bags must be tightly closed after each removal.
- ✓ For optimum result use within six months.

Disclaimer: The information contained herein is believed to be accurate, but is not warranted. Nothing contained herein constitutes a specification nor is intended to warrant suitability for the intended use. It is recommended to check the product carefully prior to application.