



## EPOXY POLYESTER POWDER COATING

Series Credentials Code: 55

### PRODUCT INTERPRETATION:

Epoxy Polyester based powder coatings are thermosetting powder and mainly used for interior general purpose and external application where there is no prolonged exposure to direct sun light. Product is recommended for use in interior situations where toughness, chemical resistance, and good mechanical resistance properties are essential, with good colour stability and excellent decorative appearance. Neat Koat Speciality Inc.'s attention to particle size control and formulation ensures optimum transfer efficiency.

### AREAS OF APPLICATION:

Epoxy polyester powders are best suited for non weatherable applications like Indoor Furniture, Appliances, White goods, Light Fittings, Switch Gears, Computer peripherals, Refrigerators, Shelving, Automotive underhood components, Hot Water Radiators, Oil Filters, Hardware items & tools.

### PRODUCT FEATURES:

- ✚ Good Mechanical Resistance.
- ✚ Excellent Chemical Resistance.
- ✚ Very Good Corrosion Resistance.
- ✚ Excellent Flow Out.
- ✚ Good Overbake Resistance.

### GENERAL SPECIFICATION:

Chemical Nature	Epoxy – Polyester Hybrid 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	< 90 um, 100 % Passing
Theoretical Coverage	9 – 11 Sq. meters / Kg. Depending on colour and film thickness.
Specific Gravity	1.4 – 1.8, depending on colour.
Gloss	Full range available from full gloss to matt.
Curing Schedule	180 °C (Object Temperature) for 15 minutes. Or 200 °C (Object Temperature) for 20 minutes.
Aesthetic Alternatives	Textured 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:

<b>Mechanical Properties:</b>	
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
<b>Chemical Properties:</b>	
Salt Spray Resistance	500 hrs. Passes
Humidity Resistance	500 hrs. Passes
Acid Resistance	Passes
Alkali Resistance	Passes
<b>Film Properties:</b>	
Gloss Level @ 60° Gloss Head	For Glossy > 85 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 Hybrid 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 Hybrid 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.