



## PURE EPOXY POWDER COATING

Series Credentials Code: 45

### PRODUCT INTERPRETATION:

Epoxy based powder coatings are thermosetting powder and mainly used for interior general purpose and external application where excellent chemical resistance and corrosion resistance properties are required. Epoxy powders are mainly used where high toughness, excellent chemical resistance, corrosion resistance, mechanical resistance, good electrical insulation properties with good adhesion required. These are not recommended on materials exposed to outdoor environment. Neat Koat Speciality Inc.'s attention to particle size control and formulation ensures optimum transfer efficiency.

### AREAS OF APPLICATION:

Epoxy powders are best suited for Automotive underhood parts, brass ware, metal cabinets, sports recreation and fitness equipment, power tools, tool boxes, safety equipments, electrical bussbars, switch gears, brake parts, chalk bord, brass plumbing and hardware, bathroom fixtures, Dryer drums, Pipe coatings, Analytical instrument cover, hospital equipments, Textile machinery etc.

### PRODUCT FEATURES:

- ✚ Excellent Chemical Resistance.
- ✚ Excellent Corrosion Resistance.
- ✚ Good mechanical properties.
- ✚ Good electrical insulation.
- ✚ Good flexibility and adhesion.

### GENERAL SPECIFICATION:

Chemical Nature	Epoxy 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 15 minutes. Or 200 °C (Object Temperature) for 20 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:

<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 Epoxy 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 Epoxy 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 compressed 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.