

Polyurethane Powder Coating Powders

PRODUCT DATASHEET

Polyurethane Powder Coating is used where high Humidity Resistance, High Salt Spray Resistance, and Excellent Exterior Durability is required. It is recommended for use in exterior situations when lower film builds (Thin Film application/Fine Film) with superior Flow are particularly important.

Polyurethane Powder Coating provides extremely good transfers efficiency and edge coverage. Product is available in Smooth finish with Satin and Glossy effect.

A pre-requisite for good physical properties of a coating is curing in the range of 195°C - 200°C for 10 min (Object Temperature).

Advantages as compare to Polyester/TGIC System

Excellent Gloss Excellent Exterior Durability Excellent Corrosion Resistance Excellent Humidity Resistance Excellent Mar and Chip Resistance Better Water Resistance Supper Flow/Leveling Good Recoat-ability and Good Storage stability

Product Specification

Sr.	Property	Range	Unit	Test Method
1	Gloss	50 – 90	%	ASTM D-523
2	Flexibility	<1/8 ″	Inch	ASTM D-522
3	Adhesion (Cross-cut)	<gt0< th=""><th>-</th><th>ASTM D-3359</th></gt0<>	-	ASTM D-3359
4	Scratch Resistance	3 to 4	Kgs	-
5	Impact Resistance	50 to 100	Kgs-cm	ASTM D-2794
6	Erichsen Indentation	8 to 10	mm	-
7	Humidity Resistance	>500	Hrs	ASTM D-2247
8	Salt Spray	>500	Hrs	ASTM B-117
9	Specific Gravity	1.3 to 1.8	-	ASTM D-792
10	Pencil Hardness	2H to 4H	-	ASTM D-3363
11	QUV Exposure	above 500	Hrs	ASTM D-2565

Application

1) Domestic Appliances

- 2) Electric Switchboxes/Enclosures
- 3) Bus Shelters & Telephone booths
- 4) Radiators/Air Conditioners
- 5) Exterior Furniture
- 6) Ventilation Equipments
- 7) Automobiles and Cycle Components
- 8) DG Set
- 9) Light Fixtures
- 10) Agricultural/Lawn and Garden Equipment & Construction Equipment
- 11) Wheels and Rims
- 12) Window Frames

Storage Conditions

The Powder should be stored indoors in the original, unopened and undamaged box in a dry place at storage temperatures below 30°C at 50 % Relative Humidity. Exposure to direct sunlight should be avoided.

<u>Shelf Life</u>

Under the stipulated storage condition of Powder the Shelf Life is 1 Year from the date of manufacturing. After this period it is recommended that powder should be tested by applying practically on the metal.

Application procedure

Coating with Corona spray gun at voltage of 60 to 75 Kv on pretreated metals, stoving (cure) in air circulated oven or IR Oven.

Industrial Hygiene

Powder handling should always be done in conjunction with proper dust collection and personal protective equipment. Please refer to the Material Safety Data Sheet for more detailed information.

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The information and recommendations in this publication are to the best of our knowledge and application parameters. Users should make their own tests to determine the suitability of these products for their own particular purposes.

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