

BPCOAT TECHNICAL DATA SHEET

CERTIFICATE NO. 100220/0001

PRODUCT DETAILS

Type: BPCOAT-PU SERIES (POLYURETHANE)

Sample Name: BEIGE SMOOTH GLOSSY ANTI GRAFFITI

Sample Code: 61S1H0338

BPCOAT-PU Series are caprolactam-free-IPDI cured polyester based powder coating used for both indoor and outdoor applications with very good chemical and physical resistance. This series show outstanding thin-film appearance and toughness with excellent weather resistance. Advantages are higher transfer efficiency, excellent storage stability, better flow of surface, superior mar resistance and they are highly resistant to humidity and salt spray.

Technical Properties

Tests Done	Units(Methods)	Value
Chemical Structure	-----	PU (Polyurethane)
Surface Appearance	-----	Smooth
Color	-----	Beige
Specific Gravity	(EN ISO 8130-3)	1,59
Gloss	(EN ISO 2813 60 °)	80-85 gloss
Hardness	Buchholz (EN ISO 2815)	>90
Flowing	(EN ISO 8130-5)	100-140
Cupping Test	(EN ISO 1520),mm	>6mm
Impact	(EN ISO 6272) kg.cm	>120
Adhesion	(EN ISO 2409)	Excellent. Gt = 0
Cylindrical mandrel	(EN ISO 1519)	>2mm
Salt Spray	(EN ISO 9227)	1000 Hour. No blistering
Yellowing	DE	<2-3
UV Resistance	(ASTM D4587), DE	Excellent

***All tests are done on steel and aluminium panels, chemically treated**

Chemical Resistance Tests

BPCOAT-PU Series are resistant to wide variety of solvents and chemicals depending on formulation. Chemical resistance requirements must be considered according to processing conditions and final use of the finished product.

Application Area

Aluminium profile, Automotive accessories and Agricultural machinery, Window frames and doors, Electrical Switchboxes, Radiators & Heaters, Ventilation Equipment, and domestic appliance.



BPCOAT TECHNICAL DATA SHEET

Pre Treatment

Powder coating is primarily used in steel, galvanized steel, aluminum, copper and zinc alloy metal surfaces. To prevent oxidation of the surface is usually oily and greasy which cause several problems for coating. So metal surface should be cleaned by a variety of chemical methods prior to coating methods in order to get the highest performance. Oil, soil, metal oxides, rubber and plastics must be thoroughly removed.

In order to improve corrosion resistance, iron phosphate or zinc phosphate is strongly used for steel surfaces. And Aluminum surfaces should be pre-treated using a chromate system prior to powder coating.

Application Method

BPCOAT-PU Series is applied by applied by tribo or corona charging at 30 to 100 kV.

Curing Conditions/ Conventional oven ;

Minimum 180°C / 10 min. (metal temperature)

Maximum 200°C / 10 min. (metal temperature)

Theoretical Coverage

Covering rate is 10,46 m²/kg at recommended film thickness of 60 µm based on our experiences. It is depend on color, specific gravity, conditions of application and shape of profile.

Storage

BPCOAT-PU Series is stored at the temperature below 25°C and approximately 50 - 60% relative humidity for one year, in original packaging (25 kg package).

For Reference Only!

All specifications in this technical data sheet are based on our current knowledge. The possibility of product development, this specification is subject to change without notice.

We recommend users to test the product in their work side before repetitive use by using this data just as a guide.

More details on our web site at:

www.bpc.com.tr

Send technical inquiries to bpc@bpc.com.tr

