



## CPC 43

# HYBRID POWDER COATING FOR DOMESTIC APPLIANCES

- excellent mechanical properties
- high chemical resistance (hot detergent solutions)
- good storage stability

## DESCRIPTION

CPC 43 is a series of powder coatings based on polyester resin cured with epoxy resin. It offers very good application and protective properties.

### Applications:

- domestic appliances
- radiators
- others

## SPECIFICATION

<b>Shades:</b>	principally whites, other shades are available
<b>Surface Appearance:</b>	smooth
<b>Gloss:</b>	glossy (75-85 %) $\angle$ 60°
<b>Density:</b>	1550 – 1650 kg/m <sup>3</sup>
<b>Coating Equipment:</b>	electrostatic
<b>Film thickness:</b>	70 $\mu$ m
<b>Spreading Rate:</b>	8 – 9 m <sup>2</sup> /kg
<b>Shelf Time:</b>	24 months
<b>Packaging:</b>	cardboard box – 20 kg
<b>Storage Conditions:</b>	in originally closed boxes in dry place at temperature 5 – 25°C

# HYBRID POWDER COATING FOR DOMESTIC APPLIANCES

## TEST RESULTS

\*0,8 mm steel panel

<b>Physical Properties:*</b>	<b>Glossy</b>
Cure parameters (object conditions)	10 min / 180°C
Film thickness in µm (ISO 2808)	60-70 µm
Gloss, units $\angle 60^\circ$ (ASTM 523, ISO 2813)	75 - 85
Adhesion (ISO 2409)	Gt 0
Impact resistance (ASTM D 2794-93)	8
Flexibility (ASTM D 552)	10 mm
Pencil hardness (ASTM D 3363)	HB – 1H
<b>Chemical Properties:</b>	
Salt spray 500 h (ISO 9227) - Delamination at cut	max. 2 mm
Hum. cabinet 500 h (ISO 6270-2) - Delamination at cut	max. 2 mm
Humidity resistance (ISO 6270-2)	<b>1000 hours, 35 – 40 µm film thickness on white cataphoresys, 70 µm on iron phosphate (Bonderite 1000)</b>
Blistering	no
Pencil hardness	F
Adhesion	Gt 0
Rusting on unscribed area	0
Scribed area – cripage	< 3 mm
Salt spray resistance (ISO 9227)	<b>500 hours, 35 – 40 µm film thickness on white cataphoresys, 70 µm on iron phosphate (Bonderite 1000)</b>
Blistering	no
Adhesion	Gt 0
Rusting on unscribed area	0
Scribed area – cripage	< 3 mm
Stain resistance	<b>24 hrs / 23 °C</b>
5 % sodium hypochlorite	OK
Laundry detergent (1% in water)	OK
Liquid fabric conditioner (Lenor)	OK
Grease resistance (ASTM D 1308)	<b>168 hrs / 23 °C</b>
Adhesion	0
Alkali resistance (ASTM D2248)	
Laundry detergent (1% in water)	3 x 8 hrs / 100 °C, OK
Blistering	0
Adhesion	0

# HYBRID POWDER COATING FOR DOMESTIC APPLIANCES

---

## SURFACE PRETREATMENT

---

<b>Aluminium:</b>	yellow or green chromate pretreated
<b>Zn-plated steel:</b>	transparent chromate pretreated
<b>Iron:</b>	zinc phosphate or low-build iron phosphate or high-build iron phosphate, cataphoresis

## CURING

---

10 min/180°C

This technical data and suggestions for use in this technical data sheet are currently correct to the best of knowledge based on laboratory work and practical experience but are subject to change without notice. Because application and conditions vary, and are beyond our control, we are not responsible for results obtained in using this product, even when used as suggested. The user should conduct tests to determine the suitability of the product for the intended use. Any liability we may have (including liability for breach of warranty, strict liability in tort, negligence or otherwise) is limited exclusively to replacement of the product or refund of its price. Under no circumstance are we liable for incidental and consequential damages. The quality system conforms to ISO 9001.