



CPC 21

POLYESTER POWDER COATING

- qualicoat approved
- excellent weathering resistance
- excellent UV resistance
- excellent chemical resistance
- good storage stability

DESCRIPTION

CPC 21 is Qualicoat approved series of powder coatings based on polyester resin cured with HAA (Primid). It offers very good application and performance characteristics. CPC 21 series of polyester powder coatings is specially developed for exterior applications with combination of excellent weathering resistance, UV resistance, good mechanical properties and levelling properties. CPC 21 is especially developed for architectural use.

Applications:

- architectural parts
- aluminium profiles
- agricultural machines
- garden furniture
- automobile parts
- bicycles

SPECIFICATION

| | |
|----------------------------|---|
| Qualicoat: | P 0509 (CPC 21-1) P 1465 (CPC 21-3) |
| Shades: | principally RAL and NCS shades; also special colours are available by arrangement |
| Surface Appearance: | smooth |
| Gloss: | glossy (CPC 21-1), 70-90% matt (CPC 21-3), 20-30% |
| Density: | 1400 – 1700 kg/m ³ , depending on colour shade |
| Coating Equipment: | electrostatic spraying, tribo |
| Spreading Rate: | 7 – 9 m ² /kg at 70 µm film thickness |
| Shelf Time: | 24 months |
| Packaging: | cardboard box – 20 kg |
| Storage Conditions: | in originally closed boxes at temperature 5 – 25°C |

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TEST RESULTS

| Physical Properties:* | CPC 21-1 | CPC 21-3 |
|---|----------------|----------------|
| Cure parameters (object conditions) | 10 min / 180°C | 20 min / 180°C |
| Film thickness (ISO 2360) | 60-80 µm | 60-80 µm |
| Gloss, units \angle 60° (ASTM 523, ISO 2813) | 70 – 90 | 20 – 30 |
| Adhesion (ISO 2409) | Gt 0 | Gt 0 |
| Bend test – conical mandrel (ISO 6860) | ≥ 5 mm | ≥ 5 mm |
| Elasticity – Cupping test (DIN ISO 1520) | ≥ 5 mm | ≥ 6 mm |
| Impact resistance – direct/reverse (ASTM D 2794) | 20/10 | 20/10 |
| Hardness (Bucholz) (ISO 2815) | ≥ 91 | ≥ 91 |
| Chemical Properties:** | | |
| Salt spray 1000 h (ISO 9227) – Delamination at cut: | ≤1 mm | ≤ 1 mm |
| Constant climate condensation water test (ISO 6270-2), 1000 hrs – blistering, delamination at cut: | 0 (S0), ≤ 1 mm | 0 (S0), ≤ 1 mm |
| Xenon arc test (ISO 16474-2), 1000 hrs gloss retention – % | ≥ 50 | ≥ 50 |

*0,8 mm steel panel

**0,7 mm chromated Al

SURFACE PRETREATMENT

| | |
|------------------|---|
| Aluminium: | yellow or green chromatising |
| Zn-plated steel: | transparent chromatising |
| Iron: | zinc phosphate or low-build iron phosphate or high-build iron phosphate |

CURING

| CPC 21-1: | CPC 21-3: |
|---------------------|---------------------|
| 170 °C, 20 – 30 min | 180 °C, 20 – 40 min |
| 180 °C, 10 – 20 min | 200 °C, 10 – 20 min |
| 190 °C, 7 – 15 min | |

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.