

General Description

CRYLCOAT® 4651-0 is a Primid® superdurable resin designed for matte one-shot systems to produce, in combination with CRYLCOAT® 4693-2, powder coatings with 60° gloss between 5 and 12%. The coatings show good flow and outdoor durability.

(Formerly CRYLCOAT® E 04251)

Preliminary Technical Data Sheet

Saturated Superdurable Polyester Resin

Product Specification

| | Limits |
|--------------------------------------|---------------|
| Appearance | Pale granules |
| Brookfield Viscosity @ 200 °C, mPa.s | Approx. 4000 |
| Color, b-value | Max. 15 |
| Acid value (mg KOH/g) | Approx. 21 |

Other Properties

| | Typical value |
|-----------------------|---------------|
| Glass transition (°C) | Approx. 59 |

Starting Formulation

| Component | Weight (%) |
|-----------------------|------------|
| CRYLCOAT® 4651-0 | 37.2 |
| CRYLCOAT® 4693-2 | 37.2 |
| Primid® XL 552 | 6.0 |
| Barium sulfate | 14.8 |
| Pigment RAL 8014 | 3.5 |
| MODAFLOW® Powder 6000 | 1.0 |
| Benzoin | 0.3 |

Extrusion & Application Conditions

| Extrusion | |
|-------------|---|
| Extruder | Twin screw |
| Speed | 300 rpm |
| Torque | 70 to 80 % |
| Temperature | 85 to 100 °C |
| Application | |
| Application | 60 micrometer film on 0.5 m steel panel |
| Spray Gun | Output voltage: 60 kV |
| Curing | 10 min @ 200 °C metal temperature |

Film Properties

| Test | Result |
|-----------------|--------|
| Gloss @ 60° (%) | 5-12 |

Shelf Life

Under normal storage conditions ($\leq 30^{\circ}\text{C}$), the shelf life of the resin will be 24 months from date of manufacturing. For product older than 24 months, it is recommended to check the acid value and the viscosity every year.

Safety & Environmental Protection

For more information, please refer to the Material Safety Data Sheet.

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