

General Description

CRYLCOAT® 4890-0 is a hydroxyl functional superdurable polyester resin for use with blocked isocyanates or uretdiones in the production of powder coatings. Coatings based on CRYLCOAT® 4890-0 exhibit superior outdoor durability.

Saturated Superdurable Polyester Resin

Product Specification

| | Limits |
|--------------------------------------|---------------|
| Appearance | Pale granules |
| Brookfield Viscosity @ 200 °C, mPa.s | 4000-6000 |
| Color, b-value | Max. 15 |
| Hydroxyl value (mg KOH/g) | 25-35 |

Other Properties

| | Typical value |
|-----------------------|---------------|
| Glass transition (°C) | Approx. 58 |

Starting Formulation

| Component | Weight (%) | |
|---|------------------|------|
| | CRYLCOAT® 4890-0 | 60.9 |
| Caprolactam-blocked Polyisocyanate (NCO content 15.3 %) | 9.1 | - |
| Uretdione (NCO content 13.5 %) | - | 10.5 |
| Titanium dioxide | 29.0 | 29.0 |
| MODAFLOW® Powder 6000 | 0.7 | 0.7 |
| Benzoin | 0.3 | 0.3 |

Extrusion & Application Conditions

| Extrusion | |
|-------------|---|
| Extruder | Twin screw |
| Speed | 250 rpm |
| Torque | 75 ± 5 % |
| Temperature | 95 to 105 °C |
| Application | |
| Application | 60 micrometer film on 0.5 mm chromated Al panel |
| Spray Gun | Output voltage: 60 kV |
| Curing | 10 min @ 200° C metal temperature |

Film Properties

| Test | Result |
|-----------------|--------|
| Gloss @ 60° (%) | 90 |

Shelf Life

Under normal storage conditions (≤30°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.

July 2020 – Supersedes previous versions