

General Description

UVECOAT® 3003 is an amorphous unsaturated polyester resin for use in UV curable powder coatings. This resin has been developed for indoor applications on PVC flooring. Coatings based on UVECOAT® 3003 combines excellent scratch and chemical resistance with good flexibility.

Unsaturated UV Curable Polyester Resin

Product Specification

| | Limits |
|--------------------------------------|---------------|
| Appearance | Pale granules |
| Brookfield Viscosity @ 175 °C, mPa.s | Approx. 3200 |
| Color, b-value | Max. 15 |
| Acid value (mg KOH/g) | <3 |

Other Properties

| | Typical value |
|-----------------------|---------------|
| Glass transition (°C) | Approx. 49 |

Starting Formulation

| Component | Weight (%) |
|-----------------------|------------|
| UVECOAT® 3003 | 71.3 |
| Photoinitiators | 2.4 |
| Titanium dioxide | 25.0 |
| MODAFLOW® Powder 6000 | 1.0 |
| Benzoin | 0.3 |

Extrusion & Application Conditions

| Extrusion | |
|-------------|--|
| Extruder | Twin screw |
| Speed | 250 rpm |
| Torque | 70 ± 5 % |
| Temperature | 95 to 105 °C |
| Application | |
| Application | 60 micrometer film on 0.5 mm chromated Al panel |
| Spray Gun | Output voltage: 60 kV Belt speed: 0.5-5 m/min |
| IR-UV oven | IR: 32 KW/m ² UV: 80-160 W/cm |

Film Properties

| Test | Result |
|----------|--------|
| Adhesion | GT 0 |

Shelf Life

Under normal storage conditions (≤25°C), the shelf life of the resin will be 12 months from date of manufacturing. For product older than 12 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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