

General Description

CRYLCOAT® 1557-5 is a carboxyl functional polyester resin for use with epoxy resins in ratios from 50/50 to 60/40 to manufacture hybrid powder coatings. Formulations based on CRYLCOAT® 1557-5 exhibit high reactivity, scratch resistance and good overall properties. CRYLCOAT® 1557-5 can be blended in all ratios with CRYLCOAT® 1544-0 to provide intermediate reactivity.

Saturated Polyester Resin

Product Specification

	Limits
Appearance	Pale granules
Brookfield Viscosity @ 200 °C, mPa.s	1500-2500
Color, b-value	Max. 15
Acid value (mg KOH/g)	66-76

Other Properties

	Typical value
Glass transition (°C)	Approx. 50

Starting Formulation

Component	Weight (%)
CRYLCOAT® 1557-5	28.5
Epoxy resin (EEW 700-900)	28.5
Titanium dioxide	29.0
Barium sulfate	10.5
ADDITOL® P 896	3.0
Benzoin	0.5

Extrusion & Application Conditions

Extrusion	
Extruder	Twin screw
Speed	300 rpm
Torque	70 to 85 %
Temperature	100 to 110 °C
Application	
Application	60 micrometer film on 0.5 mm steel panel
Spray Gun	Output voltage: 60 kV
Curing	10 min @ 170 °C metal temperature 20 min @ 160 °C metal temperature

Film Properties

Test	Result
Gloss @ 20°/60° (%)	75/92
Direct/reverse impact (kg. cm or in. lbs.)	160/160

Shelf Life

Under normal storage conditions ($\leq 25^{\circ}\text{C}$), 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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