

General Description

CRYLCOAT® 1680-6 is a highly reactive carboxyl functional polyester resin for use in 60/40 hybrid powder coatings. Coatings based on CRYLCOAT® 1680-6 combine good flexibility and flow with high gloss. CRYLCOAT® 1680-6 can be formulated with high levels of filler.

Saturated Polyester Resin

Product Specification

	Limits
Appearance	Pale granules
Brookfield Viscosity @ 175 °C, mPa.s	8600-12200
Color, b-value	Max. 25
Acid value (mg KOH/g)	45-51

Other Properties

	Typical value
Glass transition (°C)	Approx. 50

Starting Formulation

Component	Weight (%)
CRYLCOAT® 1680-6	35.5
Epoxy resin (EEW 700-900)	23.7
Titanium dioxide	39.4
MODAFLOW® Powder° 6000	1.0
Benzoin	0.4

Extrusion & Application Conditions

Extrusion	
Extruder	Twin screw
Speed	250 rpm
Torque	80 -85 %
Temperature	95 to 105 °C
Application	
Application	60 micrometer film on 0.5mm steel panel
Spray Gun	Output voltage: 60 kV
Curing	10 min @ 150° C metal temperature

Film Properties

Test	Result
Gloss @ 60° (%)	90
Direct/reverse impact on steel (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 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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