

### General Description

CRYLCOAT® 1683-0 is a high Tg carboxyl functional polyester resin for use with epoxy resins EEW 700-900 in a ratio 60/40 to manufacture hybrid powder coatings to be cured at 200°C. Formulations containing CRYLCOAT® 1683-0 exhibit excellent solvent resistance.

### Saturated Polyester Resin

### Product Specification

	Limits
Appearance	Pale granules
Brookfield Viscosity @ 200 °C, mPa.s	4200-5200
Color, b-value	Max. 20
Acid value (mg KOH/g)	45-55

### Other Properties

	Typical value
Glass transition (°C)	Approx. 73

### Starting Formulation

Component	Weight (%)
CRYLCOAT® 1683-0	35.5
Epoxy resin (EEW 700-900)	23.7
Titanium dioxide	39.5
MODAFLOW® Powder 6000	1.0
Benzoin	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 0.5mm steel panel
Spray Gun	Output voltage: 60 kV
Curing	10 min @ 200° C metal temperature

### Film Properties

Test	Result
Gloss @ 60° (%)	>90
Direct/reverse impact (kg. cm or in. lbs.)	160/160

### 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.

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