

General Description

CRYLCOAT® 4442-2 is a superdurable, low bake carboxyl functional polyester resin for use with 7% TGIC in outdoor powder coatings with full cure at 10 min x 160°C (object temperature). Coatings based on CRYLCOAT® 4442-2 provide high gloss, flow out, DOI and smoothness.

(Formerly CRYLCOAT® E 04442)

Preliminary Technical Data Sheet

Saturated Superdurable Polyester Resin

Product Specification

	Limits
Appearance	Pale granules
Brookfield Viscosity @ 200 °C, mPa.s	Approx. 1700
Color, b-value	Max. 20
Acid value (mg KOH/g)	Approx. 31

Other Properties

	Typical value
Glass transition (°C)	Approx. 59

Starting Formulation

Component	Weight (%)
CRYLCOAT® 4442-2	68.4
TGIC	5.2
Titanium dioxide	24.8
MODAFLOW® Powder 6000	1.0
Benzoin	0.6

Extrusion & Application Conditions

Extrusion	
Extruder	Twin screw
Speed	350 rpm
Torque	80 ± 5 %
Temperature	95 to 105 °C
Application	
Application	60 micrometer film on steel panel
Spray Gun	Output voltage: 60-70 kV
Curing	10 min @ 160° C metal temperature

Film Properties

Test	Result
Gloss @ 20°/60° (%)	87/93
Direct/reverse impact on steel (kg, cm or in. lbs.)	60/160

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.

July 2020 – Supersedes previous versions