

# EP-1703

Version: Aug 30, 2017

**POWDER COATING  
RESINS**

**HYBRID**

**PE : HARDENER = 70 : 30**

## Description

EP-1703 is a saturated carboxylated polyester resin designed for 70/30 hybrid powders to be cured at 180°C. Coatings based on EP-1703 combine a good flow together with good mechanical properties.

## Specification

Item	Limits
Acid value (mg KOH/g)	30 - 36
Viscosity @ 200 °C, (mPa.s)	5400 - 6600
Color, b value	Max 10

## Other

Item	Typical value
Glass transition temperature (°C)	58

## Storage conditions

The resin in its original unopened bags is stable for more than 1 year, stored in a dry place at temperature below 30°C. Avoid direct sunlight.

## Delivery form

Granules. White opaque polyethylene bags of 25kg. One ton per pallet .

## Starting Formulation

Component	Weight (g)
EP-1703	420
Epoxy resin	180
TiO <sub>2</sub>	386
Flow agent	10
Benzoin	4

## Application/Extrusion Conditions

Extrusion	
Extruder	Twin screw
Speed	250 rpm
1 <sup>st</sup> Zone Temperature	95 °C
2 <sup>nd</sup> Zone Temperature	115 °C
Application	
Application	70 micrometer film on 0.5 mm steel panel
Spray Gun	Output voltage: 70 kV
Curing	10 min @ 180° C metal temperature

## Coating Properties

Test Items	Result
Film thickness (microns)	60-80
Gloss @ 60° (%)	94
Cupping test (mm)	7
Direct impact (kg.cm )	160
Reverse impact (kg.cm )	160
Adhesion (grade)	0

## System Properties

- ❖ Medium curing speed
- ❖ Good flow
- ❖ Good mechanical properties
- ❖ Good over-baking resistance

ZHEJIANG GUANGHUA TECHNOLOGY CO., LTD <a href="http://www.khua.com">www.khua.com</a>	Customer Service	Technical Service
	Tel. 86-573-87771555 Fax 86-573-87771222	Tel. 86-573-87771188 Fax 86-573-87771222

Although the facts and suggestions in this publication are based on our own research and are believed reliable, we cannot assume any responsibility for performance or results obtained through the use of our products herein described, nor do we accept any liability for loss or damages directly or indirectly caused by our products. The user is held to check the quality, safety and all other properties of our product prior to use. Nothing herein is to be taken as permission, inducement or recommendation to practise any patented invention without a license.