

# EP-2180

Version: Aug 30, 2017

<b>POWDER COATING RESINS</b>	<b>TGIC</b>
<b>PE : HARDENER = 92 : 8</b>	

## Description

EP-2180 is a saturated carboxylated polyester resin designed for 92/8 TGIC powders to be cured at 200°C. Coatings based on EP-2180 combine a very good flow together with an excellent mechanical properties.

It's suitable for hot transfer printing.

## Specification

Item	Limits
Acid value (mg KOH/g)	39 - 45
Viscosity @ 200 °C, (mPa.s)	2800 - 3600
Color, b value	Max 15

## Other

Item	Typical value
Glass transition temperature (°C)	64

## 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-2180	552
TGIC	48
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 chromated Al panel
Spray Gun	Output voltage: 70 kV
Curing	10 min @ 200° C metal temperature

## Coating Properties

Test Items	Result
Film thickness (microns)	60-80
Gloss @ 60° (%)	94
Cupping test (mm)	9
Direct impact (kg.cm )	80
Reverse impact (kg.cm )	80
Adhesion (grade)	0

## System Properties

- ❖ Very good durable ability
- ❖ Excellent boiling water resistance
- ❖ Outstanding mechanical properties
- ❖ Good over-baking resistance
- ❖ Very good flow

<b>ZHEJIANG GUANGHUA TECHNOLOGY CO., LTD</b>  <a href="http://www.khua.com">www.khua.com</a>	<b>Customer Service</b>	<b>Technical Service</b>
	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 practice any patented invention without a license.