

EP-4109

Version: Aug 30,2017

| | |
|-------------------------------|-------------|
| POWDER COATING RESINS | TGIC |
| PE : HARDENER = 95 : 5 | |

Description

EP-4109 is a saturated carboxylated polyester resin designed for 95/5 TGIC powders to be cured at 200°C. A 1:1 dry blend based on EP-4101 and EP-4109 gives a very nice matte finish at approximately 26-30 % gloss at 60 degree.

Specification

| Item | Limits |
|-----------------------------|-------------|
| Acid value (mg KOH/g) | 19 - 24 |
| Viscosity @ 200 °C, (mPa.s) | 5000 - 6000 |
| Color, b value | Max 10 |

Other

| Item | Typical value |
|-----------------------------------|---------------|
| Glass transition temperature (°C) | 63 |

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-4109 | 570 |
| TGIC | 30 |
| TiO ₂ | 386 |
| Flow agent | 10 |
| Benzoin | 4 |

Application/Extrusion Conditions

| Extrusion | |
|----------------------------------|---|
| Extruder | Twin screw |
| Speed | 250 rpm |
| 1 st Zone Temperature | 100°C |
| 2 nd Zone Temperature | 120 °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° (%) | 90 |
| Cupping test (mm) | 9 |
| Direct impact (kg.cm) | 160 |
| Reverse impact (kg.cm) | 160 |
| Adhesion (grade) | 0 |

System Properties

- ❖ Outstanding storage stability
- ❖ High chemical resistance
- ❖ Excellent durable resistance
- ❖ Good flow

| ZHEJIANG GUANGHUA TECHNOLOGY CO., LTD www.khua.com | 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.