

# EP-1501

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**POWDER COATING  
RESINS**

**HYBRID**

**PE : HARDENER = 50 : 50**

## Description

EP-1501 is a saturated carboxylated polyester resin designed for 50/50 hybrid powders to be cured at 180°C. Coatings based on EP-1501 combine a good flow together with an excellent overbaking resistance.

## Specification

| Item                        | Limits      |
|-----------------------------|-------------|
| Acid value (mg KOH/g)       | 72 - 78     |
| Viscosity @ 200 °C, (mPa.s) | 3500 - 4500 |
| Color, b value              | Max 15      |

## Other

| Item                              | Typical value |
|-----------------------------------|---------------|
| Glass transition temperature (°C) | 50            |

## 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-1501          | 300        |
| Epoxy resin      | 300        |
| 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 | 105 °C                                   |
| Application                      |  |
| Application                      | 70 micrometer film on 0.5 mm Steel panel |
| Spray Gun                        | Output voltage: 70 kV                    |
| Curing                           | 15 min @ 180° C metal temperature        |

## Coating Properties

| Test Items               | Result |
|--------------------------|--------|
| Film thickness (microns) | 60-80  |
| Gloss @ 60° (%)          | 95     |
| Cupping test (mm)        | 7      |
| Direct impact (kg.cm )   | 160    |
| Reverse impact (kg.cm )  | 160    |
| Adhesion (grade)         | 0      |

## System Properties

- ❖ High gloss
- ❖ Very good flow
- ❖ Good mechanical properties
- ❖ Excellent over-baking resistance
- ❖ Competitive price

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