

GH-5501

Version: August 2014

POWDER COATING RESINS
TGIC
PE : HARDENER = 93 : 7

Description

GH-5501 is a saturated carboxylated polyester resin designed for 93/7 TGIC powders to be cured at 200°C. Coatings based on GH-5501 combine super durable resistance and hard film.

Specification

| Item | Limits |
|-----------------------------|---------------|
| Appearance | Pale granules |
| Acid value (mg KOH/g) | 29 - 35 |
| Viscosity @ 200 °C, (mPa.s) | 4800 - 6500 |
| Color(50% DMF), APHA | Max 150 |

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) |
|------------------|------------|
| GH-5501 | 558 |
| TGIC | 42 |
| TiO ₂ | 386 |
| Flow agent | 10 |
| Benzoin | 4 |

Application/Extrusion Conditions

| Extrusion | |
|----------------------------------|---|
| Extruder | Twin screw |
| Speed | 40 HZ |
| 1 st Zone Temperature | 95 °C |
| 2 nd 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° (%) | 92 |
| Cupping test (mm) | 2 |
| Direct impact (kg.cm) | 50 |
| Reverse impact (kg.cm) | 10 |
| Adhesion (grade) | 0 |

System Properties

- ❖ Super durable ability
- ❖ Hard film
- ❖ Good chemical resistance

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GH-5504

Version: August 2015

POWDER COATING RESINS
TGIC
PE : HARDENER = 93 : 7

Description

GH-5504 is a saturated carboxylated polyester resin designed for 93/7 TGIC powders to be cured at 200°C. Coatings based on GH-5504 combine super durable resistance. Dry blend with GH-5505 at ratio 5/5 can produce semi gloss coating.

Specification

| Item | Limits |
|-----------------------------|---------------|
| Appearance | Pale granules |
| Acid value (mg KOH/g) | 32 - 38 |
| Viscosity @ 200 °C, (mPa.s) | 1500 - 2500 |
| Color(50% DMF), APHA | Max 150 |

Other

| Item | Typical value |
|-----------------------------------|---------------|
| Glass transition temperature (°C) | 62 |

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) |
|------------------------|------------|
| GH-5504 | 558 |
| TGIC | 42 |
| TiO ₂ R 960 | 386 |
| Flow agent | 10 |
| Benzoin | 4 |

Application/Extrusion Conditions

| Extrusion | |
|----------------------------------|---|
| Extruder | Twin screw |
| Speed | 40 HZ |
| 1 st Zone Temperature | 95 °C |
| 2 nd 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° (%) | 92 |
| Cupping test (mm) | 5 |
| Direct impact (kg.cm) | 30 |
| Reverse impact (kg.cm) | 10 |
| Adhesion (grade) | 0 |
| Gloss @ 60° (%), in dry blend with GH-5505 (5/5) | 45 |

System Properties

❖ Super durable ability

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