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ZHEJIANG GUANGHUA TECHNOLOGY

**Technical Data Sheet**

# GH-4420

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| POWDER COATING RESINS | TGIC |
|---|---|
| **PE : HARDENER = 90 : 10** | |

## Description

GH-4420 is a saturated carboxylated polyester resin designed for 90/10 TGIC powders to be cured at 200°C, it combined with GH-4421 for dry blend matt application. Coatings based on GH-4420 combine a good flexibility and good mechanical property.

## Specification

| Item | Limits |
|---|---|
| Appearance | Pale granules |
| Acid value (mg KOH/g) | 49 - 55 |
| Viscosity @ 200 °C, (mPa.s) | 6000 - 7500 |
| Color(b*) | Max 10 |

## Other

| Item | Typical value |
|---|---|
| Glass transition temperature (°C) | 57 |

## 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-4420 | 540 |
| TGIC | 60 |
| $TiO_2$ | 386 |
| Flow agent | 10 |
| Benzoin | 4 |

## Application/Extrusion Conditions

| Extrusion | |
|---|---|
| Extruder | Twin screw |
| Speed | 250 rpm |
| 1st Zone Temperature | 100 °C |
| 2nd 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° (%) | 95 |
| Cupping test (mm) | 8 |
| Direct impact (kg.cm) | 50 |
| Reverse impact (kg.cm) | 50 |
| Adhesion (grade) | 0 |

## System Properties

- Excellent flexibility
- Good mechanical property


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