

# Series 7100

## "POLYCRYSTAL" –DRY BLEND POLYESTER POWDER COATING

### General Description:

7100 series Polycrystal Polyester powders are Polyester-TGIC powders based on highly cross-linked resins. Polycrystal powders possess outstanding resistance to scratching and abrasion, which gives them an advantage when it comes to processing painted products. Polycrystal powders show outstanding exterior (UV) resistance. Polycrystal powders are characterized by their extremely smooth surface and silky gloss.

### Typical Applications:

Typical uses include aluminum bars, curtain walls, garden furniture, lighting posts, lighting fixtures, exterior doors and electronic enclosures.

### Specifications:

Properties	Test Method	Value
Specific Gravity	ASTM D5965	1.2 – 1.7 g/cc
Gloss (60°)	ASTM D523	20-35 upon request
Impact Resistance	ASTM D2794	>25 kg*cm (22 Inch x Lb)
Flexibility	ASTM D522	180°, 5 mm
Pencil Hardness	ASTM D3363	>H
Adhesion	ISO 2409	GT = 0
Salt Spray	ASTM B117	>1000 hours
Humidity Resistance	ASTM D2247	>1000 hours
Accelerated Weathering	ASTM G154	1000 hours
Florida Test		1 year

All test, unless noted otherwise, were performed on AL-36 Aluminum panels  
At a film thickness of 60 - 80 microns (25 microns = 1 mil.).

### Curing Temperatures:

At Metal Temp. of 410° Fahrenheit (210°C) - 7 minutes.  
At Metal Temp. of 392° Fahrenheit (200°C) - 10 minutes.  
At Metal Temp. of 356° Fahrenheit (180°C) - 15 minutes.

### Recommendations:

Totally avoid mixing powders from different series or different vendors. Metallic powders and different batches can show small colour differences from batch to batch, this is normal and unavoidable. Add no more than 25-30 % of reclaimed powder to a virgin one.

### Storage:

Powder coating tend to absorb moisture and therefore it must be stored in a sealed container once opened or used. Also, it must be kept away from sources of heat and direct sunlight. The powder's shelf life expectancy is 12 months, at a temperature of 25°C (77°F), at a relative humidity below 60%.

### Precautionary Measures:

It is recommended that the areas surrounding the site where coating takes place be properly ventilated. The powder's particles cause irritation of the respiratory tract. Inhalation of powder must therefore be avoided. In case of contact with the skin, wash with water and soap. In case of contact with the eyes, wash with water immediately and seek medical help. A mask, gloves and protective glasses must be worn while working with powdered paint. All equipment must be grounded in order to avoid build-up of static electric current.

### General notes:

What is specifically recommended in this sheet should not be considered a substitute for consultation when formulating specifications for a specific project. All the data and recommendations contained in this sheet are based on inspections, knowledge and experience accumulated in our lab and on the ground, and they are most reliable. We claim no responsibility, implied, or otherwise. We are solely responsible for the product quality; users must verify whether it suits their specific requirements. The information contained herein is liable to modification without advance notice.

Update: 2/19