

# General Technical Information

## Polyester “PF” Series

### Description

Erie’s “PF” series powder coatings are formulated using a combination of polyester resin, HAA curative (non-toxic alternative to TGIC), and exterior durable pigmentation systems. Polyester TGIC-free coatings are excellent all-around performance coatings that can be used for a wide variety of applications. These powder coatings have great heat stability, flexibility, and cure speeds. HAA cured polyester powders are some of the best charging powders available, which leads to fantastic application characteristics. Most polyester TGIC-free coatings are designed to meet or exceed AAMA 2603 specifications. This specification stipulates a minimum of 50% gloss retention as well as minimal colour fade after 12 months of exterior exposure. Polyester coatings are some of the most widely used products on the market due to their excellent performance across the widest array of metrics of any coatings.

### Application

These products are used for a wide range of both interior and exterior applications. Typical usage of these coatings includes decorative coatings, patio furniture, aluminum extrusions (doors and window frames), fencing, agricultural applications, exterior lighting and automotive trim parts, however their excellent combination of properties allows for nearly any type of application required.

### Dry Powder Property Ranges

<i>Film Build</i> .....	1.5 to 4.0 mils (38 to 100 microns)
<i>Cure Schedule</i> .....	6 to 14 minutes at 375°F (190°C) metal temperature
<i>Particle Size</i> .....	50% to 65% > 32 micron (Alpine Jet Sieve)
<i>Overbake Resistance</i> .....	200% good, colour change less than 0.5 units
<i>Specific Gravity</i> .....	1.25 to 1.85
<i>Shelf Life</i> .....	6 to 12 months

### Cured Film Property Ranges

<i>Gloss at 60° for Smooth Finishes</i> .....	5 to 90
<i>Impact Resistance (ASTM D2794)</i> .....	80 to 160 inch-pounds
<i>Pencil Hardness (ASTM D3363)</i> .....	H to 2H
<i>Cross Hatch Adhesion (ASTM D3359) ....</i>	5B full pass
<i>Flexibility (ASTM D522)</i> .....	180° ¼” conical mandrel with no cracking
<i>Salt Spray (ASTM B117)</i> .....	1000 hours with <1/8” creep from scribe line

Note: This information is given in good faith based upon information believed to be true at the time of issue. However, no warranty expressed or implied can be given as results may vary due to application and other conditions. This table is not intended to give exact specifications for any particular product but to be used only as a general guide.