

# General Technical Information

## Epoxy “E” Series

### Description

Erie’s “E” series powder coatings are formulated using pure epoxy resin. Epoxy coatings are designed for use in a variety of specialty applications requiring excellent corrosion resistance, chemical resistance, or hardness. Epoxy coatings have relatively poor heat and UV stability and are therefore not recommended for use in applications where exposure to excessive heat and UV light are present. These products are not recommended for extended bake cycles. Due to the UV sensitivity, this type of product is only recommended for interior applications.

### Application

These products are used for a range of interior functions, such as applications where periodic exposure to machine oils and chemicals is unavoidable. Due to the inherent water impermeability of epoxy coatings, they are often used as primer systems for superior corrosion resistance.

### Dry Powder Property Ranges

|                                  |  |
|----------------------------------|--|
| <i>Film Build</i> .....          | 1.5 to 4.0 mils (38 to 100 microns)                |
| <i>Cure Schedule</i> .....       | 4 to 10 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% poor, colour change greater than 0.5 units    |
| <i>Specific Gravity</i> .....    | 1.25 to 1.85                                       |
| <i>Shelf Life</i> .....          | 3 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 3H                                      |
| <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.