



## **POLYOLEFIN COATINGS**

### **GENERAL:**

In environments that stress the need for corrosive protection, Bridgeport's POLYOLEFIN coated products offer a high level of protection, while maintaining a much more environmentally-friendly final product than other coated materials on the market. The components used to create the coating are resistant to a vast variety of corrosive chemicals, and when properly applied, provide an extremely strong shield from corrosive environments thus prolonging the life of fittings and other products.

Bridgeport takes advantage of proven protective coating technologies based on functionalized Polyolefin compositions. The proprietary compound provides exceptional adhesion to various substrates, resulting in a highly versatile material which performs well in aggressive environments due to its flexibility and impact resistance properties. The material's inherent toughness also provides resistance to abrasion, chemical attack, and permeation by liquids. The coating can also be field repaired to a near factory finish without the use of dangerous or caustic chemicals.

### **CHARACTERISTICS:**

#### UV Protection

The unique chemical properties of the Polymer-based compounds provide un-surpassed UV and Corrosion protection when installed outdoors or exposed to sunlight and other UV-producing environments. This means an extra layer of protection for long-term exposed installations.

#### Reduced Environmental Footprint

Unlike traditional PVC coated fittings and related components, Bridgeport's Polyolefin coating utilizes proven, state-of-the-art thermoplastic coating technologies which contain:

- No Reactive Ingredients
- No Phthalates
- No Halogens
- No Isocyanates
- No Heavy Metals
- No VOC's
- No Chlorine Components
- No Hydrogen Chloride Gas Emissions from Combustion



## **POLYOLEFIN COATINGS (Cont'd)**

In addition to the many environmental and health advantages Polyolefin coatings offer, it also provides the following additional beneficial characteristics:

- +Adhesion without Primers
- +Chemical and Galvanic Corrosion Protection
- +Low Smoke and Flame Spread Ratings
- +High Dielectric Strength
- +Superior Flexibility without Cracking at Low Temperatures
- +Superior mechanical, Abrasive, and Impact Resistance
- +Superior Finish
- +Light Weight
- +Joint Sealing
- +Food and Water Contact Approved
- +Field Repairability

### **PERFORMANCE:**

Acceptance and uses of thermoplastic type protective coatings are world-wide and growing. Their performance and environmental merits have been realized by numerous Government, Military, and OEM users like:

- CALTRANS (California Department of Transportation) Bridge Components
- City and County of Denver
- CDOT (Colorado Department of Transportation)

The following is a summary of Bridgeport's Polyolefin performance characteristics:

Adhesion	ASTM D4541	>1,000 psi
Hardness (Shore D)	ASTM D2240	55
Impact Resistance	ASTM D2794	>384 in./lbs.
Tensile Strength	ASTM D638	3,482 psi
Elongation	ASTM D638	498%
Salt Spray	ASTM B117	>2,000 hrs.
Q UV	ASTM G53	2,000 hrs., no significant change to color/gloss
Tabor Abrasion	ASTM D4060	100 mg loss (CS 17 wheel)
Flexibility	ASTM D522	1/8", no cracks (greater than 32%)
Dielectric	ASTM D149	893 +/-163 volts/mil (at 20mil, varies with color)
Volume Resistivity	ASTM D257	$4.67 \times 10^{13}$ ohms/cm
Flame Spread Index	ASTM E84	CLASS 1 or "A"
Smoke Index	ASTM E84	CLASS 1 or "A"
Color	-----	Light Gray

See Bridgeport's website for products available with this durable coating.