



Description

Aquaphobix Coatings have been specifically engineered to deliver a long-lasting, durable finish for marine environments, offering exceptional resistance to corrosion and harsh weather conditions. This high-performance, functionalized polyethylene copolymer-based thermoplastic powder coating is formulated for low-temperature applications on heat-sensitive materials such as aluminum, mild steel, galvanized steel, fiberglass, and composite substrates. Aquaphobix is applied using specialized installation techniques, and the use of primers may be required depending on the substrate to ensure optimal adhesion and performance.

Key Attributes

- U.V. stable
- 100% solids, no VOC's
- Minimal, non-hazardous disposal - powder coating is the overwhelming preference of the EPA, eliminating solvent fumes and exhausts that pollute the air as well as potentially toxic sludge that can contaminate the planet and must be disposed of as hazardous waste
- Collateral overspray is not problematic as with traditional liquid and coatings
- Provides excellent adhesion and flexibility for resistance to chipping, abrasion, corrosion and chemical
- Material deposition averages 92-98% relaying into decreased material costs

Typical Applications

- Environmental corrosion protection in wet, sometimes wet, or dry locations for metals, concrete, and fiberglass to resist damage from moisture, salts, chemicals and ultraviolet rays
- Marine environments, both on and off-shore applications
- Water treatment and retention
- Primary/Secondary containment

Pretreatment

To ensure maximum long-term adhesion, the substrate must be grit/media blast-cleaned, free from grease, oil, rust, mill scale or any other contaminants. Sanding/grinding and/or chemical etching may be required methods of pretreatment based on the intended substrate. Actual product performance will depend upon the circumstances under which the product is utilized. To achieve desired mechanical properties, pretreatment conditions and installation instructions must be adhered.

Typical Product Properties

Recommended Thickness		15 to 20 Mils	Theoretical Coverage	*10-15 sq.ft. / Lbs
Appearance		Smooth/ Glossy	Elongation (%)	ASTM D 638 / N/A
Specific Gravity		0.950 g/cc	Tear Strength	ASTM D1938 / N/A
Tensile Strength		10.3 MPa	Water Absorption	N/A
Impact Resistance	ASTM B2794	>140 in./Lbs.	Gloss	N/A
Taber Abrasion	ASTM D4060	37.5 mg	Toxicity Index	N/A
Hardness	Shore D	42		
Mandrel Bend	ASTM D 522	3/8 in., no cracks		
Melting Point	ASTM D3418	208° F		
Vicat Softening Point	ASTM D1525	149°F		

***Coverage can vary by type of substrate and weather conditions**

Performance Properties

Salt Fog Resistance on Steel	ASTM B117		Values after 5,000 hour exposure
-Scribed		10 ¹⁰ Impedance	
-Unscribed		10 ¹⁰ Impedance	
Blistering Rating	ASTM 0714	10	Values after 5,000 hour exposure
Rusting Rating	ASTM D610	10	Values after 5,000 hour exposure
-Rust Creepage		2/6 (mm)	
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Adhesion			
-Concrete	ASTM D7234	>868PSI	on pre-treated concrete substrate
-Steel	ASTM D4541	>1200PS	test conducted on blasted substrate

Storage Stability

Product should at all times be stored in a clean, dry area no more than 77°F (25°C). Product has an infinite shelf life if stored in a cool, dry location in sealed poly bag with desiccant packet in place.

Health and Safety

While there are no known health risks associated with Aquaphobix, established handling precautions should be observed. Appropriate respiratory protection should be used in areas with insufficient ventilation or where excessive dust may be generated, and inhalation of airborne particles should be avoided. As with all polymeric powders, Aquaphobix may ignite if exposed to an elevated-temperature ignition source and should be handled and stored away from open flames or sparks.

Disclaimer

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