



Your Formula for Success
RESINS | GEL COATS | COLORANTS

HYDROPEL® R010-FPA SERIES VINYL ESTER RESIN



Product Information

VINYL ESTER RESIN FOR INFUSION

Typical Cast Mechanical Properties ¹			
Test	Unit of Measure	Nominal	Test Method
Tensile Strength	psi/MPa	13,980/96	ASTM D 638
Tensile Modulus	psi/GPa	540,000/3.9	ASTM D 638
Tensile Elongation	%	4.7	ASTM D 638
Flexural Strength	psi/MPa	22,660/156	ASTM D 790
Flexural Modulus	psi/GPa	540,000/3.7	ASTM D 790
Heat Distortion Temp.	°F/°C @264 psi	239/115	ASTM D 648

Typical Liquid Properties ²										
VERSIONS	Catalyst	%	GT	Gel to Peak	Peak Exotherm (°F/°C)	Visc	SP	rpm	cps	% Styrene
R010-FPA-17	MEKP-925	1.0	17	7	376/191	LV	3	30	150	36

**Typical properties are not to be construed as specifications.*

DESCRIPTION

AOC's Hydropel R010-FPA is a non-thix and pre-promoted vinyl ester resin system. Other gel time versions can be considered, either by promotion changes or inhibitor recommendations.

APPLICATION

AOC's Hydropel R010-FPA is suited for manufacturing boats and marine craft along with other composite applications needing superior properties that utilize the Vacuum Infusion process.

BENEFITS

- Low viscosity allowing for fast and controlled infusing times.
- Excellent strength and toughness of the resultant laminate / composite.

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PERFORMANCE GUIDELINES

A. Keep full strength catalyst levels between 1.0% - 2.0% of the total resin weight.

B. Maintain shop temperatures between 65°F/18°C and 90°F/32°C and humidity between 40% and 90%. Consistent shop conditions contribute to consistent gel times and will help the fabricator make a high quality part.

C. Sanding and/or grinding is recommended if a secondary bond is applied to a laminate that was made with a resin containing wax.

STORAGE STABILITY

This product is stable for three months from the date of manufacture when stored in the original containers, away from direct sunlight or other UV light sources and at or below 77°F/25°C.

Storage stability of two months or less should be anticipated if the storage temperature exceeds 86°F/30°C.

After extended storage, some drift may occur in the product viscosity and gel time.

SAFETY

See the appropriate Safety Data Sheet for guidelines.

ISO 9001:2008 CERTIFIED

The Quality Management Systems at every AOC manufacturing facility have been certified as meeting ISO 9001:2008 standards. This certification recognizes that each AOC facility has an internationally accepted model in place for managing and assuring quality. We follow the practices set forth in this model to add value to the resins we make for our customers.

FOOTNOTES

(1.) Based on tests at 77°F/25°C and 50% relative humidity. All tests performed on unreinforced cured resin castings. Thixotropic components, if applicable are excluded from casting samples. Castings were post cured.

(2.) The gel times shown are typical but may be affected by catalyst, promoter, inhibitor concentration, resin, mold, and shop temperature. Variations in gelling characteristics can be expected between different lots of catalysts and at extremely high humidities. Pigment and/or filler can retard or accelerate gelation. It is recommended that the fabricator check the gelling characteristics of a small quantity of resin under actual operating conditions prior to use.



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AOC World Headquarters
955 Highway 57 East, Collierville, TN 38017

+01 901.854.2800
AOC-Resins.com

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SALES CONTACTS

NORTH AMERICA
Toll free: +1 866 319 8827
northamerica@aoc-resins.com

LATIN AMERICA
+01 863 815 5016
latinamerica@aoc-resins.com

MIDDLE EAST
+44 1206 390415
middleeast@aoc-resins.com

EUROPE
+44 1206 390415
europa@aoc-resins.com

AOC UK LTD.
+44 1206 390400
salesUK@aoc-resins.com

INDIA
+44 1206 390415
india@aoc-resins.com

ASIA/AUSTRALIA
+44 1206 390415
asia@aoc-resins.com

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