



Your Formula for Success
RESINS | GEL COATS | COLORANTS

ALTEK® R589 SERIES POLYESTER RESIN



Product Information

POLYESTER RESIN FOR RTM

Typical Cast Mechanical Properties ¹			
Test	Unit of Measure	Nominal	Test Method
Tensile Strength	psi/MPa	12,000/83	ASTM D 638
Tensile Modulus	psi/GPa	590,000/4.1	ASTM D 638
Tensile Elongation	%	2.9	ASTM D 638
Flexural Strength	psi/MPa	20,930/144	ASTM D 790
Flexural Modulus	psi/GPa	640,000/4.4	ASTM D 790
Heat Distortion Temp.	°F/°C @264 psi	158/70	ASTM D 648

DESCRIPTION

AOC's Altek R589 Series is a prepromoted polyester resin system. It is designed to be used in RTM. It is a higher reactive orthophthalic product with superior physical properties.

APPLICATION

AOC's Altek R589 Series is used in RTM (Resin Transfer Molding) and RTML processes. Uses range from RV parts to fan shrouds and other special need applications.

BENEFITS

This resin is characterized by its:

- Low viscosity
- Rapid wet-out
- Superior physical properties

Typical Liquid Properties ²										
Versions	Catalyst Type	%	Gel Time min	Gel To Peak	Peak Exotherm, °F/°C	Visc	rpm	SP #	cps	Styrene %
R589-ACC-10	MEKP-925	1.25	9	15	338/170	RV	20	2	250	39

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



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 time 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.

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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