

Product Information

Altek Polyester Resin for Filled Laminating Systems

TYPICAL CAST MECHANICAL PROPERTIES * (1) see back page

Test	Units of Measure	Nominal	Test Method
Tensile Strength	psi/MPa	8,400/58	ASTM D 638
Tensile Modulus	psi/GPa	550,000/3.8	ASTM D 638
Tensile Elongation	%	2.2	ASTM D 638
Flexural Strength	psi/MPa	13,300/92	ASTM D 790
Flexural Modulus	psi/GPa	540,000/3.7	ASTM D 790
Heat Distortion Temperature	°F/°C @264 psi	178/78	ASTM D 648

Note: Physical properties are tested on neat resin

TYPICAL LIQUID RESIN PROPERTIES* (2) see back page

VERSIONS	Viscosity, cps	Thix Index	GEI Time min	Total Cure Time	Peak Exotherm, °F/°C	Catalyst type/level	% Styrene	Filler Type/Level
C949-FPA-15	625 ¹	4.0	15	28	255/124	1%MEKP-925	32.5	46% Calcuim Carbonate

- 1) LV viscometer, spindle #3
- 2) RV viscometer, spindle #3
- 3) LV viscometer, spindle #4

*Typical properties are not to be construed as specifications.



DESCRIPTION

AOC's Altek C949-F is a pre-promoted, thixotropic polyester resin.

APPLICATION

AOC's Altek C949-F is designed to be used with filler for fabrication of tub/shower units, truck caps or other composite parts.

BENEFITS

- Fast laminate cure rate allows for increased production rates without loss of surface profile
- Reduced post print
- Good wetout/rollout properties will provide good physical properties in finished part
- Reduced shrinkage
- Low VOC Content

Altek® C949-F Series Polyester Resin

PERFORMANCE GUIDELINES

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

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

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.

Storage in plastic totes made out of materials such as polyethylene (PE) or polypropylene (PP) in particular translucent PE/PP, will accelerate gel formation and result in a significantly reduced storage stability.

Storage of this resin outdoors in translucent plastic totes may reduce the storage stability to only a few weeks. AOC cannot assume responsibility for gel formation under these storage conditions.

APPLICATION GUIDELINES

Due to the excellent curing characteristics of the Altek C949-F series resin, complete all secondary bonding as soon as possible. Exposing the laminate to sunlight will result in severe secondary bonding problems. After 24 hours of cure, it may be necessary to abrade the laminate to insure good secondary bonding, especially if the surface of the laminate is resin rich. Avoid low fiberglass content and resin puddling with this product.

SAFETY

See appropriate Material 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 and inhibitor concentrations and resin, mold and shop temperature. Variations in gelling characteristics can be expected between different lots of catalysts and at extremely high humidities. Pigment and fillers 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.



Global Contacts

Australia	alinea@aac-resins.com	Africa	alinea@aac-resins.com
Middle East	middleeast@aac-resins.com	India	india@aac-resins.com
Latin America	latinamerica@aac-resins.com	Europe	europe@aac-resins.com

The information contained in this data sheet is based on laboratory data and field experience. We believe this information to be reliable, but do not guarantee its applicability to the user's process or assume any liability for occurrences arising out of its use. The user, by accepting the products described herein, agrees to be responsible for thoroughly testing each such product before committing to production.

Our recommendations should not be taken as inducements to infringe any patent or violate any law, safety code or insurance regulation.