

Product Information

EcoTek Polyethylene Terephthalate Polyester Resin

TYPICAL LIQUID RESIN PROPERTIES* (2) see back page

	Nominal
Viscosity @ 77°F/25°C, RVT #27 @ 50 RPM, cps.	3,000
Styrene, %	29
Acid Number, mg. KOH/gr.	11.5
SPI Gel (150-190°F/65.6-87.8°C), min.	5
SPI Gel to Peak, min.	1.5
Peak Exotherm, °F/°C	430/221
Color, max.	3

TYPICAL CLEAR CAST MECHANICAL PROPERTIES* (2) see back page

	Nominal	Test Method
Tensile Strength, PSI/MPa	10,000/69	ASTM D 638
Tensile Modulus, PSI/GPa	525,000/3.62	ASTM D 638
Tensile Elongation, %	2.3	ASTM D 638
Flexural Strength, PSI/MPa	18,000/124	ASTM D 790
Flexural Modulus, PSI/GPa	560,000/3.86	ASTM D 790
Heat Distortion Temperature °F/°C @ 264 psi	248/120	ASTM D 648

*Typical properties are not to be construed as specifications.



DESCRIPTION

AOC's long heritage in Polyethylene Terephthalate chemistries has produced a tough, resilient resin with lower color than typical recyclate products. Electrical and mechanical properties meet or exceed that of isopolyesters.

FEATURES

- Contains renewable and/or recycled content.
- Superior mechanical and electrical properties
- Good surface gloss
- Suitable for Pultrusion, cold molding, SMC and BMC
- Polyethylene Terephthalate recyclate content
- Pigmentable

BENEFITS

Toughness

Flexural and tensile properties yield a durable composite with good gloss and color.

Polyethylene Terephthalate Recyclate

Recyclate content contributes to meeting any automotive recyclate content requirements for the composite.

Processability

Adaptable to a variety of fabrication processes and methods.

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EcoTek™ P460-71G 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.

STORAGE STABILITY

Resins are stable for three months from date of production when stored in the original containers away from sunlight at no more than 70°F/21°C. After extended storage, some drift may occur in gel time.

During the hot summer months, no more than two months stability at 86°F/30°C should be anticipated.

SAFETY

See appropriate Material Safety Data Sheet for guidelines.

ISO 9001:2000 CERTIFIED

The Quality Management Systems at every AOC manufacturing facility have been certified as meeting ISO 9001:2000 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)

The gel times shown are typical but may be affected by catalyst, promoter and inhibitor concentrations in resin, and environmental 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.

(2)

All tests at 77°F/25°C and 50% relative humidity. All tests performed on unreinforced cured resin castings. Castings were post cured.

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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.