EcoTek®
C515-BCAG-13
Polyester Resin

Product Information

EcoTek Polyester Resin for Bonding to ABS

TYPICAL CAST MECHANICAL PROPERTIES * see back page (1)

Test	Units of Measure	Nominal	Test Method
Tensile Strength	psi/MPa	7,600/52.4	ASTM D 638
Tensile Modulus	psi/GPa	510,000/3.5	ASTM D 638
Tensile Elongation	%	3.7	ASTM D 638
Flexural Strength	psi/MPa	17,700/122	ASTM D 790
Flexural Modulus	psi/GPa	510,000/3.5	ASTM D 790
Heat Distortion Temperature	°F/°C @264 psi	128/53	ASTM D 648

*Typical properties are not to be construed as specifications.

TYPICAL LIQUID PROPERTIES 25ºC * see back page (2)

Test	Units of Measure	Nominal Value
Viscosity, Brookfield		
LV #3 @60 rpm	cps	600
Thix Index, 6/60	-	3.0
Nominal Styrene	%	37
Gel Time, 100g,		
2% Butanox M-50	minutes	13
Peak Temperature	°F/°C	302/150

AOC®
Proven Performance
Protecting the Planet

DESCRIPTION

AOC's EcoTek C515-BCAG-13 is a fully promoted, thixotropic, polyester resin.

APPLICATION

AOC's EcoTek C515-BCAG-13 is a polyester resin designed neat, styrene suppressed, for backing Acrylonitrile Butadiene Styrene (ABS) in hand lay-up/ spray-up applications.

Display excellent adhesion to ABS, as well as acrylic.

BENEFITS

- The combined renewable bio-derived content and/or recycled content of C515-BCAG-13 is 22%.
- **Low Styrene**

New industry low in styrene content for product that bonds to acrylic and ABS.

- **Cure profile**

Quick gel time with a moderate peak temperature.

- **Wetout/Rollout**

Designed for minimum roll, enhanced processability.

Note:
The EcoTek C515-BCAG-13 is not recommended for Marine Barrier Coat applications.

EcoTek®
C515-BCAG-13
Polyester Resin

EcoTek® GREEN TECHNOLOGIES

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.

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

SAFETY

See appropriate Material Safety Data Sheet for guidelines.

APPLICATION GUIDELINES

Due to the curing characteristics of the EcoTek C515-BCAG-13 it is desirable to complete all secondary bonding as soon as possible. Exposure of the laminate to sunlight will result in severe secondary bonding problems. After 24 hours of cure, it may become necessary to abrade the laminate to insure good secondary bonding, especially if the surface of the laminate have been allowed to become resin rich. Low fiberglass content and resin puddling should be avoided with this product.

The ability of an unsaturated polyester resin to bond to ABS or acrylic is influenced by many factors. Resin is only one of these factors. The type and amount of filler used, the type and color of the acrylic used, and the conditions during the thermoforming process are but a few of the factors that effect the ability of the resin to bond to the acrylic. Therefore, it is vitally important that the fabricator evaluates for themselves the fitness of this product for their processes.

To insure high quality fabricated parts. AOC recommends that fabricators utilize "Best Practice Guidelines" for polyester, acrylic and ABS sheet.

ISO 9001:2008 CERTIFIED

The Quality Management Systems at every AOC manufacturing facility have been certified as meeting ISO 9002 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 of the unpromoted base resin, at a 65% solids content, used in the manufacture of EcoTek C515-BCAG-13 at 77°F/25°C. All tests performed on unreinforced cured resin castings. Thixotropic components, if applicable, are excluded from casting samples. Castings were prepared using 1.25% MEKP, 0.125% Cobalt 12%, and 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.

(3)
Sanding and/or grinding is recommended if a secondary bond is applied to an EcoTek C515-BCAG-13 resin laminate.

AOC®
Proven Performance
Protecting the Planet

955 Highway 57 East
Collierville, TN 38017
Toll Free: (866) 319-8827
www.aoc-resins.com

www.green-resins.com