

ATLAC® E-NOVA MA 6215

CHEMICAL/PHYSICAL NATURE

Atlac® E-Nova is an evolutionary development building on 40 years of unsaturated polyester and epoxy vinyl ester (urethane) technology.

Atlac® E-Nova results in resin systems tailored to the needs of customer and end-users, offering enhanced properties over currently available vinyl ester resins. Atlac® E-Nova MA 6215 is an epoxy Bisphenol A Vinylester modified resin, dissolved in styrene. The resin is pre-accelerated and low viscos.

MAJOR APPLICATIONS

Atlac® E-Nova MA 6215 has been specifically developed for Injection and Infusion processes.

PRINCIPAL PROPERTIES

Atlac® E-Nova MA 6215 has excellent wet out and air-release properties. The resin can be cured with normal methyl ethyl ketone peroxide like Butanox M50 or Curox M 312, or Butanox LPT-IN for longer gel time. Compared to conventional Vinylester resins foaming after MEK peroxide addition is highly reduced in Atlac® E-Nova MA 6215 leading to less air bubble enclosure and reduced inhibition inside the laminate.

APPROVALS

Cured Atlac® E-Nova MA 6215 is certified by Lloyd's Register and Registro Italiano Navale (R.I.Na) for use in Marine applications.

PRODUCT SPECIFICATIONS UPON DELIVERY

Property	Range	Unit	TM
Appearance	Clear – sl. hazy	-	2265
Viscosity	80 – 90	mPa.s	2013
Solids content, IR	58.5 – 60.5	%	2033
Water content	0.01 – 0.10	%	2350
Time from 25 – 35 °C	43 – 49	Minute	2625
Time from 25°C - Peak	70 – 85	Minute	2625
Peak temperature	105 – 135	°C	2625

REMARKS

Viscosity measurement: Z2/100 s⁻¹/ 23 °C

Reactivity determined with 3.0 g Butanox M 50 added to 100 g of resin.

PROPERTIES OF THE LIQUID RESIN (TYPICAL VALUES)

Property	Value	Unit	TM
Flash point	33	°C	2800
Stability, no init., dark, 25°C	6	Month	-

PROPERTIES OF CAST UNFILLED RESIN (TYPICAL VALUES)

Property	Value	Unit	TM
Tensile strength	70	MPa	ISO 527-2
Tensile E-modulus	4.0	GPa	ISO 527-2
Elongation at break	2 - 3	%	ISO 527-2
Flexural strength	120	MPa	ISO 178
Flexural E-Modulus	4.0	GPa	ISO 178
Heat Deflection Temp. (HDT)	105	°C	ISO 75-A
Barcol hardness GYZI 934-1	45	Barcol	ASTM D2580
Water absorption, 24 h, 60 °C	0.5	%	ISO 175

CURING CONDITIONS

Atlac® E-Nova MA 6215 with less inhibitor cured with 1.5% Butanox M-50.

After 24 h at RT post curing for 6 h at 100°C.

GUIDELINES BEFORE USE

Before use, the resin should be conditioned at a well defined application dependent temperature (usually 15°C minimum for a MEKP / Co cure).

STORAGE GUIDELINES

The resin should be stored in a dark and dry place at temperatures between 5°C and 30°C.

Shelf life is reduced at higher temperatures and the properties of the resin might change during storage. The shelf life of styrene containing vinylester resins will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only.

MATERIAL SAFETY

A Material Safety Data Sheet of this product is available on request.

TEST METHODS

Test methods (TM) referred to in the table(s) are available on request.

Aliancys is a leading global company active in the sales of Quality Resins for composite applications. Together with its customers, Aliancys is pushing the limits of both composite part manufacturing and performance. Taking an integral approach to new product development, Aliancys is using its full expertise in resin chemistry, material science, and component manufacturing for shaping new applications in composites. So let's talk and increase our mutual business success, both today and tomorrow. More information on www.aliancys.com

PRODUCT INQUIRY? PLEASE CLICK HERE

The user is held to check the quality, safety and other properties of the product referred to herein. The information and recommendations in this document are to the best of our knowledge and reliable. However, no rights whatsoever can be derived from this document or the information contained therein by any party, other than those expressly accepted by a selling entity of the Aliancys group of companies ("Aliancys selling entity") in a binding sale and purchase agreement for product referred to herein. For the avoidance of doubt the Aliancys group of companies makes no warranty of any kind, express or implied, including those of merchantability and fitness for purpose. Unless explicitly agreed to otherwise in writing by the Aliancys selling entity, all offers, quotations, sales and deliveries of Aliancys products are subject to the general conditions of sale of such Aliancys selling entity. Atlac®, Beyone™, Daron®, Neomould®, Neoxil®, Palatal®, Palapreg®, Synolite™, Aliancys™, the Aliancys™ logo, and the LET'S TALK/ logo are registered trademarks of Aliancys AG. For more information: www.aliancys.com