Product Data Sheet

Atlac *E-Nova* MA 6215

Atlac *E-Nova*

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 customers and end-users, offering enhanced properties over currently available vinyl ester resins.

Major applications

Atlac *E-Nova* MA 6215 is developed for injection and infusion technics.

Chemical/physical nature

Atlac *E-Nova* MA 6215 is a pre-accelerated , low viscosity, epoxy bisphenol A vinyl ester modified resin.

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 LPT for longer gel time.

Product specifications upon delivery

Property	Range	Unit	TM
Viscosity, 23°C	80 - 90	mPa.s	2013
Solids content, IR	58.5 - 60.5	%	2033
Appearance	clear - sl. hazy	-	2265
Water content	0.01 - 0.10	%	2350
Gel time from 25 to 35°C	43 - 49	minutes	2625
Cure time from 25°C to peak	70 - 82	minutes	2625
Peak temperature	105 - 135	°C	2625

Curing conditions
Conditions: 100 g resin + 3,0 g Butanox M 50

Properties of the liquid resin (typical values)

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

Properties of cast unfilled resin (typical values)

Property	Value	Unit	TM
Barcol hardness GYZJ 934-1	45	Barcol	ASTM D2580
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
Water absorption, 60°C,24h	0.5	%	ISO 175

Curing conditions
All properties are measured at 20°C unless otherwise specified.
Cure system: Atlac *E-Nova* MA 6215 with less inhibitor and 1.5% Butanox M-50.
All samples were cured during 24 hrs at ambient temperature, followed by a postcure of 6 hrs at 100°C.

Guidelines before use

Before use, the resin should be conditioned at a well-defined, application dependant temperature (usually 15°C minimum for a MEKP / Co cure). Stir the product before blending.

Storage guidelines

The resin should be stored indoors in the original, unopened and undamaged packaging, in a dry place at temperatures between 5°C and 30°C and the properties might change during storage. The shelf life of styrene containing unsaturated polyesters will be significantly reduced when exposed to light and/or higher temperatures. Store in dark and in 100% light tight containers only.

Material Safety

A material safety data sheet for the product is available on request.

Test methods

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

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