

COLPOLY RH 5050 A

Hybrid Resin (Vinyl Ester and Unsaturated Polyester)

Description:

- » Colpoly RH 5050 A is a high performance pre-accelerated hybrid resin based on a mixture of an unsaturated polyester resin and a vinyl ester resin dissolved in styrene.
- » The resin has low viscosity.
- » Colpoly RH 5050 A resin was primarily developed for quality marine applications.

Application:

Resin for SCRIMP process (vacuum infusion).

Features and benefits:

- » Excellent mechanical properties.
- » Good cure properties at low peak exotherm.

Physical properties of liquid resin at 25 °C:

Property	Range	Method / According to standard
Appearance	Clear	
Viscosity; #2/20 rpm	150 - 200 mPa·s	MH1009 / ISO 3219
Non-volatile matter	55 - 65%	MH1155 / ISO 3251

Curing characteristics (at 25 °C):

Property	Range	Method / According to standard
Gel time	70 - 120 minutes	MH3021
Exothermic temperature (peak)	140 - 160 °C	100 g resin, 1.0% MEKP-50

Cure:

- » It is recommended that gel time is checked in the customer's plant as age, temperature, humidity and catalyst will produce varied gel times.
- » The product should not be used when temperature condition is below 18 °C.

Physical characteristics of cured nonreinforced base resin (version with gel time <20 min):

Property	Range	Method / According to standard
Elongation at break	2.5 - 3.0%	ISO 178
Flexural strength	80 - 90 MPa	ISO 178
E - modulus	3100 - 3500 MPa	ISO 178
Heat distortion temperature	85 - 100 °C	ISO 75 A

Note: The information contained herein is provided in good faith and is to the best of our knowledge accurate, but we assume no liability for its accuracy or completeness. Therefore, the buyer is advised to determine the suitability of this product for the intended use. We retain the right to make any changes according to technological progress or further developments. For safety information please refer to the current Material Safety Data Sheet.

Edition: January 2020

Handling and safety precautions:

- » Colpoly RH 5050 A is flammable liquid and should be kept away from naked flames.
- » It is highly recommended that resin is stored at stable temperatures between 5 °C and 35 °C, preferably indoors, and away from direct sunlight.
- » Shelf life is reduced at higher temperatures and properties like viscosity and gel time of the resin might change during storage.

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