

COLVINYL H 110 A-LP

Epoxy Vinyl Ester Resin

Description:

- » Vinyl ester (epoxy BPA based) resin and low-profile additive filled with inorganic filler dissolved in styrene.
- » The resin is pre-accelerated and thixotropic.
- » **CAUTION:** Prolonged storage or unfavorable storage conditions may cause slight separation, hence agitation of the resin before use is recommended.

Application:

- » The resin is used to make various parts that are exposed to high mechanical and thermal loads.
- » Intended for RTM processing.
- » Also, can be used for hand lay-up and/or spray-up application.

Features and benefits:

- » Low reactivity and cures without shrinkage when used correctly.
- » Excellent strength and toughness.
- » Good surface profile, with reduced post cure.
- » Medium thixotropic index (3.0 - 3.5; #4, 10/100 rpm).

Physical characteristics of the liquid resin:

Property	Range	Method / According to standard
Appearance	Beige	
Acid value	5 - 15 mg KOH/g	MH1051 / ISO 2114
Density, 25 °C	1.29 - 1.31 kg/L	MH1028 / ISO 2811
Styrene content	28 - 32%	MH2034
Viscosity; 25 °C, #4/10 rpm	950 - 1500 mPa·s	MH1009 / ISO 3219
Viscosity; 25 °C, #4/100 rpm	350 - 500 mPa·s	MH1009 / ISO 3219
Flash point	34 °C	DIN 51 755
Shelf life at 25 °C in darkness	4 months	

Curing characteristics at 25 °C:

Property	Range	Method / According to standard
Gel time	20 - 25 minutes	MH3021 / MH3023 100 g resin, 2.0% MEKP-50
Time from 25 °C to peak	15 - 25 minutes	
Exothermic temperature (peak)	130 - 150 °C	

Cure:

- » It is recommended that gel time be checked in the customer's plant as age, temperature, humidity, and catalyst will produce varied gel times.
- » The catalyst level should not exceed 2.5% or fall below 1.0% for proper cure at ambient temperature.
- » The product should not be used when temperature condition is below 18°C.

Handling and safety precautions:

- » COLVINYL H 110 A-LP 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.
- » For further details, please see the relevant Safety Data Sheet.

Disclaimer

This data is based on experience, for its completeness, we assume no liability. As we take no influence on the processing, it lies within the obligation of the customer to test, whether it is suitable for the intended purpose, before using the product. Any change in the processing procedure, the environmental conditions or the failure to comply with instructions may unfavorably influence the result. This Technical Datasheet is available on our website at www.helios.si. Should there be any discrepancies between this document and the version that appears on the website, then the version on the Website will take precedence.

TECHNICAL DATASHEET

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