

COLPOLY RP 7015/8

Unsaturated Polyester Resin

Description:

- » Unsaturated polyester resin based on dicyclopentadiene, dissolved in styrene.
- » The resin has a medium reactivity and low viscosity.

Application:

The resin is suitable for applications in hot press moulding and pultrusion, typical applications are in field of electrical engineering, building and transport.

Features and benefits:

- » Optimal wetting of the glass fibre.
- » Good mechanical properties.
- » High HDT.

Physical characteristics of the liquid resin:

Property	Range	Method / According to standard
Appearance	Clear	
Acid value	10 - 20 mg KOH/g	MH1051 / ISO 2114
Density, 25 °C	1.10 - 1.12 kg/L	MH1028 / ISO 2811
Styrene content	32 - 35%	MH2034
Viscosity; 25 °C, #2/20 rpm	300 - 400 mPa·s	MH1009 / ISO 3219
Flash point	34 °C	DIN 51 755
Shelf life at 25 °C in darkness	6 months	

Curing characteristics at 25 °C:

Property	Range	Method / According to standard
Gel time	16 - 20 minutes	MH3021 / MH3023 100 g resin, 0.25% Co Acc. 6%, 1.3% MEKP-50
Time from 25 °C to peak	10 - 20 minutes	
Exothermic temperature (peak)	170 - 190 °C	

Curing characteristics at 80 °C:

Property	Range	Method / According to standard
Time from 65 °C to 90 °C	7 - 9 minutes	MH3024 2% BP-50
Time from 65 °C to peak	10 - 12 minutes	
Exothermic temperature (peak)	200 - 220 °C	

Physical characteristics of cured nonreinforced base resin:

Property	Range	Method / According to standard
Density, 20 °C	1.20 - 1.24 kg/L	ISO 1183
Barcol hardness	40 - 45	EN 59
Tensile strength	60 - 65 MPa	ISO R 527
Elongation at break	2.5 - 3.0%	ISO R 527
Flexural strength	90 - 110 MPa	ISO 178
E - modulus in tension	3600 - 3800 MPa	ISO R 527
Heat distortion temperature	90 - 95 °C	ISO 75 A
Glass transition temperature	105 - 115 °C	ISO 537

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 25 °C.
- » The product should not be used when temperature condition is below 18 °C.

Handling and safety precautions:

Colpoly RP 7015/8 is flammable liquid and should be kept away from naked flames. 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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Issue Date: April 2025

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