

## COLPOLY 7609 FRI

### Unsaturated Polyester Resin

#### Description:

- » Low viscosity unsaturated polyester resin for GRP dissolved in styrene.
- » Colpoly 7609 FRI is preaccelerated and contains halogenated fire retardant resin.
- » CAUTION: Prolonged storage or unfavorable storage conditions may cause slight separation, hence agitation of the resin before use is recommended.

#### Application:

- » Resin has been specifically designed for applications where fire retardancy is required.
- » The resin is suitable for SCRIMP process (vacuum infusion).
- » The resin is version of Colpoly 7608, can be used for building, transport and industrial markets.
- » Resin Colpoly 7608 is tested according to ECE Regulation 118.

#### Features and benefits:

- » Good mechanical and wetting properties.
- » Medium / fast cure.
- » Outstanding durability.

#### Physical characteristics of the liquid resin:

Property	Range	Method / According to standard
Appearance	White, opaque	
Acid value	15 - 25 mg KOH/g	MH1051 / ISO 2114
Density, 25 °C	1.11 - 1.12 kg/L	MH1028 / ISO 2811
Styrene content	36 - 40%	MH2034
Viscosity, 25 °C, #2/20 rpm	100 - 140 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	28 - 32 minutes	MH3021 / MH 3023 1.0% MEKP-50
Time from 25 °C to peak	46 - 54 minutes	
Exothermic temperature (peak)	160 - 180 °C	

#### Physical characteristics of cured nonreinforced base resin:

Property	Range	Method / According to standard
Density, 20 °C	1.19 - 1.21 kg/L	ISO 1183
Barcol hardness	35 - 40	EN 59
Tensile strength	60 - 65 MPa	ISO R 527
Elongation at break	3.0 - 3.5%	ISO R 527
Flexural strength	90 - 110 MPa	ISO 178
E - modulus in tension	3500 - 3700 MPa	ISO R 527
Impact resistance	10 - 15 kJ/m <sup>2</sup>	ISO 179
Heat distortion temperature	75 - 80 °C	ISO 75 A
Glass transition temperature	90 - 105 °C	ISO 537

#### TECHNICAL DATASHEET

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**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 7609 FRI 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](http://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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