

## COLPOLY 7167

### Unsaturated Polyester Resin

#### Description:

Unsaturated polyester resin based on isophthalic acid and neopentyl glycol, modified with acrylics and dissolved in styrene.

#### Application:

- » Colpoly 7167 is designed for a wide variety of casting applications where resin combined with inorganic filler such as aluminium trihydrate (ATH) and cast.
- » Resin is especially versatile for applications such as Solid Surface where they provide strength and thermal shock.
- » We recommend for curing casting mass mixture of catalyst (MEKP/AAP) like e.g. Akperox ER 33 (AKPA KIMYA), Trigonox 61 (AKZO) etc.

#### Features and benefits:

- » Excellent thermal shock resistance.
- » Consistent cured matrix colour.
- » Fast cure and cure follow-through.

#### Physical characteristics of the liquid resin:

Property	Range	Method / According to standard
Appearance	Slightly hazy	
Acid value	10 - 18 mg KOH/g	MH1051 / ISO 2114
Density, 25 °C	1.08 - 1.12 kg/L	MH1028 / ISO 2811
Monomers content	32 - 34%	MH2034
Viscosity; 25 °C, #2/20 rpm	1000 - 1200 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	9 - 11 minutes	MH3021 / MH3023 100 g resin, 0.2 g Co Acc. 5% 2.0% MEKP-50
Time from 25 °C to peak	20 - 30 minutes	
Exothermic temperature (peak)	160 - 180 °C	

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

Property	Range	Method / According to standard
Density, 20 °C	1.17 - 1.23 kg/L	ISO 1183
Barcol hardness	45 - 50	EN 59
Tensile strength	80 - 90 MPa	ISO R 527
Elongation at break	3.5 - 5.5%	ISO R 527
Flexural strength	130 - 150 MPa	ISO 178
E - modulus in tension	3000 - 3300 MPa	ISO R 527
Impact resistance	20 - 30 kJ/m <sup>2</sup>	ISO 179
Heat distortion temperature	80 - 90 °C	ISO 75 A
Glass transition temperature	115 - 125 °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 7167 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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