

## COLPOLY 7160

### Unsaturated Polyester Resin

#### Description:

- » Unsaturated polyester resin for GRP, based on isophthalic acid and neopentyl glycol dissolved in styrene.
- » Colpoly 7160 is UV stabilized.
- » UV absorbers absorbing the UV component of sunlight and it are not 100% effective and with time the UV absorber is overcome. The rate depends on the actual climatic conditions experienced; resulting in possible colour change and/or surface degradation.

#### Application:

High quality gel coats in marine or sanitary ware applications.

#### Features and benefits:

- » Excellent mechanical strength.
- » High hydrolysis resistance.

Approval: Lloyd's Register of Shipping

#### Physical characteristics of the liquid resin:

Property	Range	Method / According to standard
Appearance	Clear	
Acid value	10 - 18 mg KOH/g	MH1051 / ISO 2114
Density, 20 °C	1.08 - 1.10 kg/L	MH1028 / ISO 2811
Styrene content	39 - 41%	MH2034
Viscosity, 20 °C	600 - 750 mPa·s	MH1009 / ISO 3219
Colour	max. 150 APHA	MH1125 / ISO 6271
Flash point	34 °C	DIN 51 755
Shelf life at 25 °C in darkness	6 months	

#### Curing characteristics at 20 °C:

Property	Range	Method / According to standard
Gel time	5 - 9 minutes	MH3021 / MH3023 100 g resin, 0.33% Co Acc. 6% 2.0% MEKP-50
Time from 20 °C to peak	11 - 16 minutes	
Exothermic temperature (peak)	180 - 190 °C	

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

Property	Range	Method / According to standard
Density, 20 °C	1.21 - 1.23 kg/L	ISO 1183
Barcol hardness	41 - 45	EN 59
Tensile strength	80 - 90 MPa	ISO R 527
Elongation at break	3.5 - 4.5%	ISO R 527
Flexural strength	130 - 150 MPa	ISO 178
E - modulus in tension	3400 - 4000 MPa	ISO R 527
Impact resistance	10 - 20 kJ/m <sup>2</sup>	ISO 179
Heat distortion temperature	95 - 105 °C	ISO 75 A
Glass transition temperature	120 - 130 °C	ISO 537

**Handling and safety precautions:**

Colpoly 7160 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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