

# **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 is 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
Time from 20 °C to peak	11 - 16 minutes	100 g resin, 0.33% Co Acc. 6%
Exothermic temperature (peak)	180 - 190 °C	2.0% MEKP-50

**Note:** The information contained herein is provided in good faith and is to the best of our knowledge accurate, but we assume no liability for its accuracy or completeness. Therefore, the buyer is advised to determine the suitability of this product for the intended use. We retain the right to make any changes according to technological progress or further developments. For safety information please refer to the current Material Safety Data Sheet.

Edition: July 2023

### TECHNICAL DATA SHEET



#### 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.

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