

COLPOLY 7172

Unsaturated Polyester Resin

Description:

Unsaturated polyester resin for GRP, based on isophthalic acid and standard glycols dissolved in styrene.

Application:

Quality gel coats in general purpose or marine ware applications.

Features and benefits:

- » Good flexibility.
- » Good impact resistance.
- » Outstanding resistance to hydrolysis.

Approval: Lloyd's Register of Shipping

Physical characteristics of the liquid resin:

Property	Range	Method / According to standard
Appearance	Clear	
Acid value	10 - 25 mg KOH/g	MH1051 / ISO 2114
Density, 25 °C	1.10 - 1.12 kg/L	MH1028 / ISO 2811
Styrene content	31 - 35%	MH2034
Viscosity; 25 °C, #2/20 rpm	1100 - 1400 mPa·s	MH1009 / ISO 3219
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	6 - 10 minutes	MH3021 / MH3023 100 g resin, 0.33% Co Acc. 6% 2.0% MEKP-50
Time from gel time to peak	6 - 10 minutes	
Exothermic temperature (peak)	175 -195 °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 - 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 ²	ISO 179
Heat distortion temperature	90 - 100 °C	ISO 75 A
Glass transition temperature	115 - 125 °C	ISO 537

Handling and safety precautions:

Colpoly 7172 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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