

COLPOLY 7528

Unsaturated Polyester Resin

Description:

- Unsaturated polyester resin for GRP, based on isophthalic acid and standard glycols dissolved in styrene.
- >> The resin is thixotropic and has a built-in accelerator system giving rapid curing and short demolding time.
- >> Contains color change indicator and barrier-forming agents to reduce styrene emission.
- >> CAUTION: Prolonged storage or unfavourable storage conditions may cause slight separation, hence agitation of the resin before use is recommended.

Application:

- General purpose applications hand lay-up and spray-up (boats, seats, containers, parts for car bodies, sporting equipment).
- >> Recommended laminate thickness applied wet-on-wet 2 5 mm.
- It is recommended that all laminates that been heat-cured, exposed to direct sulight, or allowed to cure more than 48 hours at room temperature be sanded before the next laminate is applied.

Features and benefits:

- Excellent mechanical properties.
- Medium thixotropic index (2.5 3.2).
- Outstanding durability

Physical characteristics of the liquid resin:

Property	Range	Method / According to standard
Appearance	Blue, opaque	
Acid value	15 - 25 mg KOH/g	MH1051 / ISO 2114
Density, 25 °C	1.10 - 1.12 kg/L	MH1028 / ISO 2811
Styrene content	40 - 44%	MH2034
Viscosity, 25 °C, #2/10 rpm	900 - 1100 mPa·s	MH1009 / ISO 3219
Flash point	34 °C	DIN 51 755
Shelf life at 25 °C in darkness	4 months	

Curing characteristics at 25 °C:

Property	Range	Method / According to standard
Gel time	15 - 25 minutes	MH3021 / MH3023
Time from 25 °C to peak	25 - 45 minutes	100 g resin,
Exothermic temperature (peak)	110 - 140 °C	2.0% MEKP-50

Physical characteristics of cured nonreinforced base resin:

Property	Range	Method / According to standard
Density, 20 °C	1.18 - 1.22 kg/L	ISO 1183
Tensile strength	80 - 90 MPa	ISO R 527
Elongation at break	2.0 - 3.0%	ISO R 527

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Flexural strength	110 - 130 MPa	ISO 178
E - modulus in tension	4000 - 4500 MPa	ISO R 527
Impact resistance	10 - 15 kJ/m ²	ISO 179
Heat distortion temperature	100 - 110 °C	ISO 75 A
Glass transition temperature	110 - 130 °C	ISO 537

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 ambient temperature.
- >> The product should not be used when temperature condition is below 18 °C.

Handling and safety precautions:

Colpoly 7528 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.

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