

POLIGRAPH 140 PLUS PREMIUM

1. DESCRIPTION

Medium-low viscosity, fully polymerizable, highly reactive and thixotropic orthophthalic polyester resin.

2. PROPERTIES

- Fast curing cycle.
- Compatible with pigments.
- High mechanical properties.
- Improved thermal conductivity.

3. APPLICATIONS

- Specially designed as a base resin for working with fibreglass.
- Excellent intercoat adhesion and very low linear and volumetric shrinkage.
- Inert mineral fillers such as calcium carbonates, aluminium trihydrate, dolomite, and silica can be added. The percentage of MEK peroxide to be added is between 0.75% and 1%, although it can be increased up to 2% to reduce the gel time.
- The application can be manual or by machine.
- May be used in pultrusion processes, manual application, BMC and SMC.

4. TECHNICAL CHARACTERISTICS

Appearance	Dark liquid
Exothermic peak temperature (in 45 min)	53 °C
Density (kg / cm³)	1.5 – 1.7
Gel time [25°C] (min)¹	10 – 15
Viscosity Brookfield [H3, 25°C] (cP)	600 – 1300

(1) 100/6% CoOct, 0,3%/1,2% PMEK

5. MECHANICAL CHARACTERISTICS

	APPLY STANDARD	VALUE
Flexural modulus (MPa)	UN 14125	10 000 – 12 000
Flexural strength (MPa)	UN 14125	35 – 55
Maximum deflection (mm)	UN 14125	0.35 – 0.55
Tensile modulus (MPa)	UN 527	6 500 – 7 500
Tensile strength (MPa)	UN 527	25 – 45
Elongation at break (mm)	UN 527	0.25 – 0.45

Mechanical properties of catalyzed resin

	APPLY STANDARD	VALUE
Flexural modulus (MPa)	UN 14125	50 000 – 60 000
Flexural strength (MPa)	UN 14125	1000 – 1500
Maximum deflection (mm)	UN 14125	5 – 6
Tensile modulus (MPa)	UN 527	21 000 – 24 000
Tensile strength (MPa)	UN 527	600 – 750
Elongation at break (mm)	UN 527	5 – 6

Mechanical properties of glass fibre reinforced resin (75%)

6. STORAGE AND PACKAGING

- The product should be stored in a dry place at a temperature not exceeding 25°C.
- The expiry date is 6 months under the conditions mentioned above.
- Generally, the products will be supplied in drum format
- For other quantities and/or packaging: contact Graphenano Composites Sales Department