

POLIGRAPH 140 TA

1. DESCRIPTION

POLIGRAPH 140 TA is an orthophthalic unsaturated polyester resin of last generation modified with graphene-based nanotechnology, for use in the manufacture of nano-hybrid composites that considerably increases the mechanical, physical and biological properties. The resin is semi flexible and of medium reactivity. POLIGRAPH 140-TA is pre-accelerated with cobalt salts and contains a thixotropic agent.

2. PROPERTIES

- Excellent mechanical performance.
- Stronger laminates than with general-purpose resins.
- Good chemical resistance.
- Resistant to diluted acids and alkalis.
- Recommended when good mechanical and/or chemical properties are required.

3. APPLICATIONS

POLIGRAPH 140-TA can be applied both in wet lay-up and spray lay-up, presenting a minimum drop out on the vertical surfaces due to its thixotropy. Its field of application is wide, being able to be used for the manufacture of boats, tanks, bodies, silos, etc.

4. TECHNICAL CHARACTERISTICS

APPEARANCE	Dark liquid
EXOTHERMIC PEAK TEMPERATURE (IN 45 MIN)	95 °C
DENSITY (kg / cm³)	1.0 – 1.1
GEL TIME [25°C] (min)¹	25 – 30
VISCOSITY BROOKFIELD [H3, 25°C] (cP)	300 – 450

(1) 100/1.5 PMEK

5. MECHANICAL CHARACTERISTICS

	APPLY STANDARD	VALUE
FLEXURAL MODULUS (MPa)	UN 14125	3000 – 5000
FLEXURAL STRENGTH (MPa)	UN 14125	60 – 100
MAXIMUM DEFLECTION (mm)	UN 14125	1.0 – 3.0
TENSILE MODULUS (MPa)	UN 527	2000 – 3000
TENSILE STRENGTH (MPa)	UN 527	60 – 80
ELONGATION AT BREAK (mm)	UN 527	3.0 – 4.0

Mechanical properties of catalyzed resin

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.