



Technical Data Sheet:

UP-150T

Product Name and Identification:

- Product Name: UP-150T
- Chemical name: Orthophthalic Unsaturated Polyester Resin

Product Description:

UP-150T is a pre-accelerated and thixotropic unsaturated polyester resin based on phthalic acid. With medium viscosity and low water absorption, this high-quality resin is an excellent choice for manufacturing various glass fiber reinforced plastics such as boats and kayaks. Glass fiber reinforced laminates made with UP-150T exhibit excellent mechanical strength, good durability, and exceptional strength. Thanks to its pre-accelerated and thixotropic properties, UP-150T offers excellent handling and easy processing during manufacturing.

Physical and Chemical Properties:

1. **Viscosity:** 700-1000 mPa.s
2. **Percent Solids:** 62-65 %
3. **Density at 20 °C:** 1.05-1.13 g/cm³
4. **Acid Value (Solids):** <30 mg KOH/g
5. **Color (gardener):** <3
6. **Gel Time:** 15-20 minute
7. **Curing time:** 20-30 minute
8. **Peak Temperature:** <200 °C

Technical Performance:

Parameter	Result	Units	Test Method
Hardness (Barcol):	35- 45	-	ASTM D2583
Tensile Strength:	60 - 70	Mpa	ISO 527-2
Elongation at Break:	3 - 4	%	ISO 527-2
Flexural Strength:	90 - 110	Mpa	ISO 178
Flexural Modulus:	2500 - 3500	Mpa	ISO 178
Heat Distortion Temperature:	80 - 90	°C	ISO 75-2
Water Absorption, 24 hrs.:	≤ 0.30	%	ISO 621958

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UP Resins and Organic Peroxides



Application and Use: Marine Industries Fiberglass Pools Cooling Tower Water Park Equipment

Curing Conditions: At a temperature of 25°C for every 100 grams of resin adding 1.44 grams (1% concentration) of cobalt accelerator and 2.2 grams of hardener (MEKP-A60).

Packaging and Shelf Life:

Packaging Options: UP-150T is conveniently packaged in robust 200 kg metal barrels.

Shelf Life: Under optimal storage conditions, UP-150T exhibits a shelf life of 6 months.

