



Technical Data Sheet:

UP-250T

Product Name and Identification:

- Product Name: **UP-250T**
- Chemical name: **Isophthalic Unsaturated Polyester Resin**

Product Description:

UP-250T is a high-quality unsaturated polyester resin based on isophthalic acid, designed to offer excellent mechanical and chemical properties. This pre-accelerated and thixotropic resin possesses desired viscosity and low water absorption, making it an ideal choice for manufacturing various glass fiber reinforced plastics such as boats, kayaks, and industrial articles. Products made with UP-250T exhibit excellent mechanical resistance, good strength, and exceptional durability, thanks to its excellent mechanical properties.

Physical and Chemical Properties:

- 1. Viscosity:** 800-1000 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:** >190 °C

Technical Performance:

Parameter	Result	Units	Test Method
Hardness (Barcol):	40 - 45	-	ASTM D2583
Tensile Strength:	80 - 90	Mpa	ISO 527-2
Elongation at Break:	3 - 4	%	ISO 527-2
Flexural Strength:	>120	Mpa	ISO 178
Flexural Modulus:	2500 - 3500	Mpa	ISO 178
Heat Distortion Temperature:	90 - 100	°C	ISO 75-2
Water Absorption, 24 hrs.:	≤ 0.30	%	ISO 621958

Application and Use:

Marine Industries

Water Park Equipment

Curing Conditions: At a temperature of 25°C for every 100 grams of resin adding 1.8 grams (1% concentration) of cobalt accelerator and 2.2 grams of hardener (MEKP-A60).

Packaging and Shelf Life:

Packaging Options: UP-250T is conveniently packaged in robust 200 kg metal barrels.

Shelf Life: Under optimal storage conditions, UP-250T exhibits a shelf life of 6 months.

