

# **Technical Data Sheet:**

**UP-70B** 

#### **Product Name and Identification:**

• Product Name: UP-70B

• Chemical name: Orthophthalic Unsaturated Polyester Resin

## **Product Description:**

UP-70B is an unsaturated polyester resin based on phthalic acid, designed to provide exceptional mechanical strength and durability for a wide range of applications. Products made with this resin exhibit excellent strength and are particularly suitable for manufacturing glass fiber reinforced plastics such as boats and kayaks. The versatility of UP-70B makes it a sought-after option for creating concrete molds, chairs, tables, tanks, and other household items including sinks and bathroom fixtures.

### **Physical and Chemical Properties:**

1. Viscosity: 500-600 mPa.s

2. Percent Solids: 62-65 %

3. Density at 20 °C:  $1.05-1.13 \text{ g/cm}^3$ 4. Acid Value (Solids): <20 mg KOH/g

5. Color (gardener): <2

6. Gel Time: 5-10 minute 7. Curing time: 10-15 minute 8. Peak Temperature: <200 °C

#### **Technical Performance:**

Parameter	Result	Units	Test Method
Hardness (Barcol):	35 - 40	-	ASTM D2583
Tensile Strength:	70 - 80	Мра	ISO 527-2
Elongation at Break:	2 - 4	%	ISO 527-2
Flexural Strength:	90 - 120	Мра	ISO 178
Flexural Modulus:	2500 - 3000	Мра	ISO 178
Heat Distortion Temperature:	70 - 80	٥С	ISO 75-2
Water Absorption, 24 hrs.:	≤ 0.30	%	ISO 621958

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Application and Use:

Sink

Vanity

**GRP Pipes** 

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-70B is conveniently packaged in robust 200 kg metal barrels. Shelf Life: Under optimal storage conditions, UP-70B exhibits a shelf life of 6 months.



