

Chemical / physical nature:

UP - 401 is an Orthophthalic unsaturated polyester resin with high reactivity and medium Viscosity.

Major application:

The UP-401 is intended for production of fiber-glass composite materials with appropriate mechanical properties for piping application, auto-motive industry, phone booths, etc.

Stability:

Under the above mentioned storage condition the stability of UP - 401 will be 4 month ex work.

Storage:

UP - 401 should be storage indoors in original Unopened and undamaged containers in a dry place at storage temperature under 25 °C. Exposure to sunlight should be avoided.

**Technical information:**

Specific	Amount	Unit	Standard
Solvent	Styrene		
Appearance	Clear		
Solid content	65 + 2	Percent	ISO 3251
Acid Value	Max: 30	mg KOH/g	ISO 2114
Viscosity of SMC,BMC resin	400-800	CPS	ISO 2555
Density	1.13 + 0.5%	g/cm3	ISO 1676
Gel time*	10 -20	min	*
Exothermic Peak	170 -190	°C	*
Exothermic time	15 - 30	Min	*

* 100 gr resin UP - 401 with 1 gr cobalt octoate 1% metal and 1 gr MEKP at 25°C.

Properties of cast resin :

Specific	Amount	Unit	Standard
Tensile strength	60 - 80	MPa	ISO 527
Tensile modulus	4-7	MPa	ISO 527
Elongation at break	3-6	Percent	ISO 527
HOT	70 + 2	°C	ISO 75
Hardness	35 Min	Barcol	ASTM D 2583

*100 gr resin with cobalt octoate 1% metal : 1% and MEKP:1% Post cure: 24 hour at room temperature and 2 hour at 80 °C.