

Chemical / physical nature:

UP - 509 is an terephthalic unsaturated polyester resin with high reactivity and medium Viscosity.

Major application:

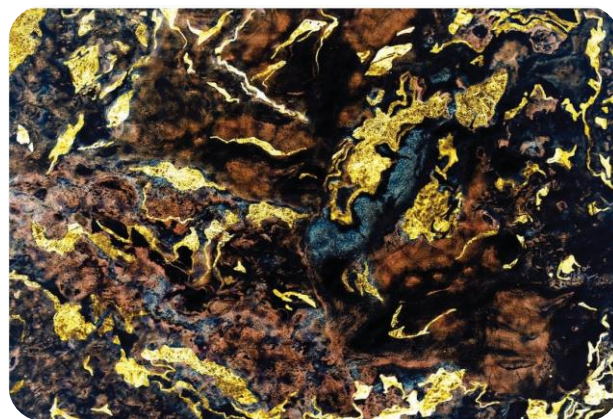
The UP-509 has with specific mechanical and thermal. This resin with high HOT intended in first layer before vinyl ester and other process that need high HOT.

Stability:

Under the above mentioned storage condition the stability of UP - 509 will be 4 month ex work.

Storage:

UP - 509 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	58+ 2	Percent	ISO 3251
Acid Value	Max: 20	mg KOH/g	ISO 2114
Viscosity of SMC,BMC resin	300-800	CPS	ISO 2555
Density	1.13+0.5%	g/cm3	ISO 1676
Gel time*	15 -25	min	*
Exothermic Peak	170 - 195	°C	*
Exothermic time	20- 35	minute	*

* 100 gr resin UP - 509 with 1 gr cobalt octoate 1% metal and 1 gr MEKP at 25°C.

Properties of cast resin :

Specific	Amount	Unit	Standard
Tensile strength	80 - 95	MPa	ISO 527
Elongation at break	4-7	!Percent	ISO 527
Elongation at break	2-4	Percent	ISO 527
HOT	120 + 2	°C	ISO 75
Hardness	20-035	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.