



# Orthophthalic unsaturated polyester Resin UP-964

## Properties of cast resin\*

### Chemical / physical nature

UP – 964 is an Orthophthalic unsaturated polyester resin with moderate reactivity and consumer's required Viscosity.

### Major applications

The UP-964 polyester is an appropriate resin for solid surface production. Also due to its high flexibility, this resin is invented for sheet molding compounds and other general fiberglass applications.

### Specification

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	300-800	cps	ISO 2555
Density	1.13±0.5%	g/cm <sup>3</sup>	ISO 1675
Gel time *	8-12	min	*
Exothermic Peak	140-170	°C	*
Exothermic time	10-20	minute	*

\* 100 gr resin UP – 964 with 1 gr cobalt octoate 1% metal and 1 gr MEKP at 25°C.

Property	Value	Unit	Standard
Tensile strength	50-70	MPa	ISO 527
Tensile modulus	3-6	GPa	ISO 527
Elongation at break	3-6	Percent	ISO 527
HDT	45 ± 2	°C	ISO 75
Hardness	Min 45	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.

### Storage

UP – 964 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.

### Stability

Under the above mentioned storage condition the stability of UP – 972 will be 4 month ex work.