



### Unsaturated polyester resin

### Orthophthalic Polyester Resin

#### Product Description:

Kimia O-721 is an un-promoted orthophthalic based Unsaturated Polyester Resin with low color, medium viscosity and very good mechanical properties for ambient temperature cure with MEK peroxide.

#### Characteristics and Advantages:

- Low color
- Medium viscosity
- Very good mechanical properties
- Excellent adhesion to glass fibers
- Outstanding filler binding power

#### Uses:

- Casting decorative parts and accessories
- Manufacturing embedded parts
- Highly transparent castings
- Hand lay-up
- Urban furniture fabrication
- Aqua park equipment fabrication
- Playing ground equipment fabrication
- Solid surface
- Artificial stone

#### Technical Properties:

#### Physical data in a liquid state at 25 C

Properties	Unit	Value	Test method
<b>Appearance</b>	NA	Clear	<b>NA</b>
<b>Color</b>	Gardner	Max 1	<b>ASTM D1544</b>
<b>Viscosity (at 25°C)</b>	mPa.s (cP)	380 - 480	<b>ISO 2555</b>
<b>Density (at 23°C)</b>	g/cm³	1.2 - 1.3	<b>ASTM D1475</b>
<b>Acid number</b>	mg KOH/g	Max 26	<b>ASTM D1639</b>
<b>Solid content</b>	%	62 ± 2	<b>ASTM D1259</b>
<b>Gel time*</b>	min	6-8	<b>ASTM D2471</b>
<b>Curing time</b>	min	16-25	<b>ASTM D2471</b>
<b>Water absorption</b>	wt%	Max 0.5	<b>ISO 62</b>

This information is continuously measured and considered a part of the product's technical specifications, and their presence is only for a better description of the product.



### Typical non-reinforced casting properties

Tensile strength	MPa	Min 50	ISO 527-2
Tensile elongation	%	3 - 5	ISO 527-2
Flexural strength	MPa	100	ISO 178
Heat distortion temperature(HDT)	°C	Min 50	ASTM D648
Hardness (Barcol)	NA	40 ± 2	ASTM D2583
Linear shrinkage	%	Max 1.3	ASTM D2566

\* 100 gr resin + cobalt octoate 1% metal + 1% MEKP

\* Post cure : 24 hour at room temperature and 2 hour at 80 °C

The usual protective measures employed during the handling of Unsaturated Polyester Resins should be observed. Further product safety information can be obtained from our Material Safety Data Sheet which is available on request.

**Packaging:** 200 kg (net) in steel drums

**Storage:** Store in a cool place below 25 °C and away from moisture and direct sunlight. Under the above-mentioned storage conditions, the shelf life of the resin will be at least 6 months ex-works.