



## Unsaturated polyester resin Orthophthalic Polyester Resin

### Product Description:

Kimia O-772 is an un-promoted orthophthalic based Unsaturated Polyester Resin with good mechanical and chemical properties, high viscosity, resistance to hydrolysis and impact for high temperature cure with TBPB.

### Characteristics and Advantages:

- Good mechanical and chemical properties
- High viscosity
- Resistance to hydrolysis
- Impact resistant

### Uses:

- Manufacturing SMC and BMC parts

### Technical Properties:

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

Properties	Unit	Value	Test method
Appearance	NA	Clear	NA
Color	Gardner	Max 2	ASTM D1544
Viscosity (at 25°C)	mPa.s (cP)	1100-1300	ISO 2555
Density (at 23°C)	g/cm <sup>3</sup>	1.1139	ASTM D1475
Acid number	mg KOH/g	14-18	ASTM D1639
Solid content	%	65 ± 2	ASTM D1259
Gel time*	sec	100-150	ASTM D2471
Curing time	sec	130-200	ASTM D2471
Peak exothermic temperature	°C	Max 300	ASTM D2471
Water absorption	wt%	Max 0.1	ISO 62
Flash point (open cup)	°C	24	ASTM D92

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.

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### Typical non-reinforced casting properties

Tensile strength	MPa	Min 50	ISO 527-2
Tensile elongation	%	4.48	ISO 527-2
Tensile modulus	MPa	1133	ISO 527-2
Flexural strength	MPa	Min 120	ISO 178
Flexural modulus	MPa	3646	ISO 178
Heat distortion temperature(HDT)	°C	Min 120	ASTM D648
Hardness (Barcol)	NA	Min 40	ASTM D2583
Linear shrinkage	%	Max 1.1	ASTM D2566

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.