

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
- Excellent adhesion to glass fibers
- Very good mechanical properties
- 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
Appearance	NA	clear	NA
Color	Gardner	Max 1	ASTM D1544
Viscosity (at 25°C)	mPa.s (cP)	380-480	ISO 2555
Density (at 23°C)	g/cm ³	1.1293	ASTM D1475
Acid number	mg KOH/g	Max 26	ASTM D1639
Solid content	wt%	62±2	ASTM D1259
Gel time*	min	6-08	ASTM D2471
Curing time	min	16-25	ASTM D2471
Peak exothermic temperature	°C	Max 190	ASTM D2471
Water absorption	wt%	Max 0.3	ISO 62
Flash point (open cup)	°C	22	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.

KIMIA O-721

Technical data sheet



www.kimiare sin.com

Typical non-reinforced casting properties

Properties	Unit	Value	Test method
Tensile strength	MPa	Min 60	ISO 527-2
Tensile elongation	%	8.86	ISO 527-2
Tensile modulus	MPa	639	ISO 527-2
Flexural strength	MPa	Min 115	ISO 178
Flexural modulus	MPa	2384	ISO 178
Heat distortion temperature (HDT)	°C	Min 60	ASTM D648
Hardness (Barcol)	NA	Min 40	ASTM D2583
Linear shrinkage ($\Delta L/L$)	%	Max 1.3	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.