

**Technical data sheet** 



# Unsaturated polyester resin

# **Orthophthalic Polyester Resin**

## **Product Description:**

Kimia O-720 is an un-promoted orthophthalic based unsaturated polyester resin with low reactivity, medium viscosity, good flexibility and transparency for ambient temperature cure with MEK peroxide.

#### **Characteristics and Advantages:**

- Very low color
- Medium viscosity
- Excellent adhesion to glass fibers
- Excellent mechanical and chemical properties
- Outstanding filler binding power

#### Uses:

- Manufacturing pipes
- Manufacturing tanks and reservoirs
- Fabricating structural hygienic fittings
- Gel coats

### **Technical Properties:**

Physical data in liquid state at 25°C

Properties	Unit	Value	Test method
Appearance	NA	clear	NA
Color	Gardner	Max 0.5	ASTM D1544
Viscosity (at 25°C)	mPa.s (cP)	400-650	ISO 2555
Density (at 23°C)	g/cm³	1.1339	ASTM D1475
Acid number	mg KOH/g	Max 26	ASTM D1639
Solid content	wt%	62±3	ASTM D1259
Gel time*	min	12	ASTM D2471
Curing time	min	18	ASTM D2471
Peak exothermic temperature	°C	Max 200	ASTM D2471
Water absorption	wt%	Max 0.3	ISO 62
Flash point (open cup)	°C	24.5	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**

Properties	Unit	Value	Test method
Tensile strength	MPa	Min 70	ISO 527-2
Tensile elongation	%	4.9	ISO 527-2
Tensile modulus	MPa	1106	ISO 527-2
Flexural strength	MPa	Min 130	ISO
Flexural modulus	MPa	2577	ISO
Heat distortion temperature (HDT)	°C	Min 75	ASTM D648
Hardness (Barcol)	NA	Min 44	ASTM D2583
Linear shrinkage (ΔL/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.

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