

# KIMIA O-745

## Technical data sheet



www.kimioresin.com

### Unsaturated polyester resin

#### Orthophthalic Polyester Resin

##### Product Description:

Kimia O-745 is an un-promoted orthophthalic based unsaturated polyester resin with very low color, medium viscosity and good mechanical properties for ambient temperature cure with MEK peroxide.

##### Characteristics and Advantages:

- Very low color
- Good flexibility and transparency
- Good mechanical properties

##### Uses:

- Lacquer and electrical insulation applications

##### Technical Properties:

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

Appearance	NA	Clear	N
Color	Gardner	Max 0.3	ASTM D1544-98
Viscosity (at 25°C)	mPa.s (cP)	400-500	ISO
Density (at 23°C)	g/cm <sup>3</sup>	1.1446	ASTM D1475
Acid number	mg KOH/g	Max 26	ASTM D1639
Solid content	wt%	64±2	ASTM D1259
Gel time*	min	8-	ASTM D2471
Curing time	min	15	ASTM D2471
Peak exothermic temperature	°C	Max 190	ASTM D2471
Water absorption	wt%	Max 0.25	ISO
Flash point (open cup)	°C	2	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 40	ISO 527-2
Tensile elongation	%	9.2	ISO 527-2
Tensile modulus	MPa	415	ISO 527-2
Flexural strength	MPa	Min 70	ISO 178
Flexural modulus	MPa	1410	ISO 178
Heat distortion temperature (HDT)	°C	Min 55	ASTM D648
Hardness (Barcol)	NA	Min 30	ASTM D2583
Linear shrinkage ( $\Delta L/L$ )	%	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.

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