

KIMIA 715

Orthophthalic Unsaturated Polyester Resin

- Low Reactivity



LIQUID RESIN PROPERTIES

PROPERTY	VALUE / RANGE	UNIT	TEST METHOD
Viscosity (25°C)	300–450	cP	ASTM D2196
Solid Content	65–67	%	ISO 3251
Acid Value	15–22	mg KOH/g	ASTM D1639
Gel Time (25°C)*	10–18	min	ASTM D2471
Cure Time/Time to Peak	18–28	min	ASTM D2471
Peak Exotherm Temp.	Max 170	°C	ASTM D2471
Specific Gravity	1.11–1.13	–	ASTM D1475
Color (Gardner)	Max 3	–	ASTM D1544

* Cured with 1.0% Cobalt Octoate (1%) and 1.5% MEKP at 25°C.

APPLICATIONS

- Fabrication of soft / flexible resin sheets
- Sculptures and decorative statues
- Artificial water fountains and rocks
- Flexible decorative panels and moldings

CURED MECHANICAL & THERMAL PROPERTIES

PROPERTY	VALUE	UNIT	TEST METHOD
Barcol Hardness	35–40	–	ASTM D2583
Tensile Strength	50–65	M Pa	ASTM D638
Tensile Modulus	2.8–3.2	G Pa	ASTM D638
Elongation at Break	0.3–0.5	%	ASTM D638
Flexural Strength	80–100	M Pa	ASTM D790
Flexural Modulus	3.1–3.5	G Pa	ASTM D790
HDT (Heat Deflection)	Max 60	°C	ASTM D648
Water Absorption (24 h)	Max 0.5	%	ASTM D570
Volumetric Shrinkage	6.0–7.0	%	ASTM D2566

