

Cyclo-Olefin Polymer Optical Grades

Property	Test Standard	Unit	ZEONEX® K26R	ZEONEX® K22R	ZEONEX® T62R	ZEONEX® 360R
Physical Properties						
Specific gravity	ASTM D792	-	1.02	1.02	1.03	0.95
Melt flow rate (MFR) (280 °C, 21.18 N)	ISO 1133	g/10min	56	32	16	18 (260 °C)
Water absorption (23 °C-sat)	ASTM D570	%	<0.01	<0.01	<0.01	<0.01
Optical Properties						
Refractive index	ASTM D542	nd	1.535	1.535	1.536	1.509
Light transmittance	ASTM D1003	%	92	92	92	92
Mechanical Properties						
Tensile strength	ISO 527	MPa	54	72	67	37
Tensile modulus	ISO 527	MPa	2530	2570	2650	2960
Flexural strength	ISO 178	MPa	80	115	98	83
Flexural modulus	ISO 178	MPa	2360	2410	2540	2880
Izod impact strength (notch 3.2 mm)	ASTM D256	J/m	23	23	23	10
Thermal Properties						
Glass transition temperature	JIS K7121	°C	143	143	154	121
Coefficient of thermal expansion	ASTM E831	cm/cm °C	6 x 10 ⁻⁵	6 x 10 ⁻⁵	6 x 10 ⁻⁵	7 x 10 ⁻⁵

Typical properties. Not to be used for purposes of establishing specification(s).