

LEXANT™ RESIN OQ4005

REGION ASIA

DESCRIPTION

MVR of 8, UV-stabilized PC. Optical grade with UV cut-off up to 400 nm, greater optical purity than standard grades. Suitable for sunglass and sunvisor markets.

TYPICAL PROPERTY VALUES

Revision 20250115

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	64	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	60	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	6	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	78	%	ASTM D638
Tensile Modulus, 50 mm/min	2300	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	96	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2310	MPa	ASTM D790
Flexural Stress, yield, 2 mm/min	97	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, unnotched, -30°C	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C	910	J/m	ASTM D256
Izod Impact, notched, -30°C	128	J/m	ASTM D256
THERMAL			
Vicat Softening Temp, Rate B/50	145	°C	ASTM D1525
HDT, 1.82 MPa, 6.4 mm, unannealed	129	°C	ASTM D648
CTE, -40°C to 40°C, flow	6.06E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.16E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
PHYSICAL			
Specific Gravity	1.2	-	ASTM D792
Mold Shrinkage, flow	0.77	%	SABIC method
Mold Shrinkage, xflow	0.77	%	SABIC method
Water Absorption, (23°C/saturated)	0.14	%	ISO 62-1
Melt Volume Rate, MVR at 300°C/1.2 kg	8	cm ³ /10 min	ISO 1133
OPTICAL			
Light Transmission, 2.54 mm	87	%	ASTM D1003
Haze, 2.54 mm	0.4	%	ASTM D1003
ELECTRICAL			
Dielectric Constant, 1.1 GHz	2.8	-	SABIC method
Dissipation Factor, 1.1 GHz	0.0063	-	SABIC method
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	2 – 4	Hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Maximum Moisture Content	0.02	%	
Melt Temperature	280 – 310	°C	
Nozzle Temperature	270 – 290	°C	
Front - Zone 3 Temperature	280 – 310	°C	
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	80 – 110	°C	

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