

Oupilon

Polycarbonate Resin

Properties	Test Method	Terms	Units	Gamma-ray Resistance		
				RS-3001R	RS-1001R	EB-3001R
				Gamma-ray Resistance	Gamma-ray Resistance	Gamma-ray Resistance
				-	-	-
Physical properties						
Density	ISO 1183	-	g/cm ³	1.21	1.21	1.20
Water absorption		23degC, 50%RH 23degC, Underwater	%	- 0.24	- 0.24	- 0.24
Rheological properties						
Melt Mass-flow Rate	ISO 1133	Temperature Load	g/10min	15	8	15
Melt Volume-flow Rate			cm ³ /10min	15	7	14
			degC	300	300	300
			kgf	1.20	1.20	1.20
Moulding shrinkage (3.2mmt)	-	MD TD	%	0.5 - 0.7 0.5 - 0.7	0.5 - 0.7 0.5 - 0.7	0.5 - 0.7 0.5 - 0.7
Mechanical properties						
Tensile modulus	ISO 527-1 , 527-2	-	MPa	2500	2200	2500
Yield stress			62	62	62	
Yield strain			%	6.7	6.3	6.5
Nominal strain at break			124	100	120	
Stress at 50% strain			MPa	-	-	-
Stress at break	MPa	-	-	-		
Strain at break	%	-	-	-		
Flexural strength	ISO 178	-	MPa	90	93	92
Flexural modulus			2100	2200	2300	
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m ²	NB	NB	NB
Charpy notched impact strength		23 degC	kJ/m ²	63	78	65
Thermal properties						
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	126 139	128 141	126 139
Coefficient of Linear thermal expansion	ISO 11359-2	MD TD	1/degC	6.5E-05 6.6E-05	6.5E-05 6.6E-05	6.5E-05 6.6E-05
Flammability	UL94	-	-	-	-	-
Electrical properties						
Relative permittivity	IEC 60250	100Hz 1MHz	-	-	-	-
Dissipation factor	IEC 60250	100Hz 1MHz	-	-	-	-
Volume resistivity	IEC 60093	-	ohm-m	3E+14	3E+14	3E+14
Surface resistivity	IEC 60093	-	ohm	6E+15	6E+15	6E+15
Electric strength	IEC 60243-1	1mmt	MV/m	-	-	-
		2mmt	MV/m	-	-	-
		3mmt	MV/m	-	-	-
Comparative tracking index (CTI)	UL746A	-	-	-	-	-

The listed properties are portrayed as general information only and are not product specifications.

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