

TOPAS® 8007S-04

Cyclic Olefin Copolymer (COC)

Injection molding grade with high moisture barrier specially manufactured for healthcare applications and pharmaceutical packaging

Property	Value	Unit	Test Standard
Physical Properties			
Density	1010	kg/m ³	ISO 1183
Melt volume rate (MVR)	32	cm ³ /10min	ISO 1133
Water absorption (23°C-sat)	0,01	%	ISO 62
Water vapor permeability @ 23°C, 85% RH	0,025	g×mm/(m ² ×day)	DIN 53122
Mechanical Properties			
Tensile modulus (1mm/min)	2600	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	63,0	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	4,5	%	ISO 527-2/1A
Charpy impact strength @ 23C	20	KJ/m ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	2,6	KJ/m ²	ISO 179/1eA
Thermal Properties			
Glass transition temperature (20°C/min)	78	°C	ISO 11357-1,-2
DTUL @ 0.45 MPa	75	°C	ISO 75-1, -2
Vicat softening temperature B50 (50°C/h 50N)	80	°C	ISO 306
Flammability @1.6mm nom. thickn.	HB	Class	UL94
Electrical Properties			
Relative permittivity at 1-10 kHz	2,35	-	IEC 60250
Volume resistivity	>1E14	ohm×m	IEC 60093
Comparative tracking index CTI	>600	-	IEC 60112
Optical Properties			
Deg. of light transmission (t=2mm)	91	%	ISO 13468-1
Haze (t=2mm)	<1,2	%	ISO 14782
Refractive index (589nm, 25°C)	1,53	-	ISO 489

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