

TECHNICAL DATA SHEET

[English Units]



TOPAS® 8007S-04

Cyclic Olefin Copolymer (COC)

1,53

Property	Value	Unit	Test Standard
Physical Properties			
Density	1010	kg/m ³	ISO 1183
Melt volume rate (MVR) (260°C, 2.16kg)	32	cm ³ /10min	ISO 1133
Melt flow rate (MFR) (260°C, 2.16kg)	29	g/10min	calculated
Water absorption (23°C-sat)	0,01	%	ISO 62
Water vapor permeability @ 23°C, 85% RH	0,06	g×mil/100in ² ×day	DIN 53122
Mechanical Properties			
Tensile modulus (1mm/min)	380	Kpsi	ISO 527-2/1A
Tensile stress at yield (50mm/min)	9100	psi	ISO 527-2/1A
Tensile strain at yield (50mm/min)	4,5	%	ISO 527-2/1A
Charpy impact strength @ 23C	9,5	ft-lbs/in ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	1,24	ft-lbs/in ²	ISO 179/1eA
Thermal Properties			
Glass transition temperature (10°C/min)	172	°F	ISO 11357-1,-2,-3
DTUL @ 0.45 MPa	167	°F	ISO 75-1, -2
Vicat softening temperature B50 (50°C/h 50N)	176	°F	ISO 306
Flammability @1.6mm nom. thickn.	HB	Class	UL94
Electrical Properties			
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

