

# TECHNICAL DATA SHEET

[English Units]



## 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
<b>Physical Properties</b>			
Density	1010	kg/m <sup>3</sup>	ISO 1183
Melt volume rate (MVR)	32	cm <sup>3</sup> /10min	ISO 1133
Melt flow rate (MFR) (230°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 <sup>2</sup> ×day	DIN 53122
<b>Mechanical Properties</b>			
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 <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength @ 23°C	1,24	ft-lbs/in <sup>2</sup>	ISO 179/1eA
<b>Thermal Properties</b>			
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
<b>Electrical Properties</b>			
Comparative tracking index CTI	>600	-	IEC 60112
<b>Optical Properties</b>			
Deg. of light transmission	91	%	ISO 13468-2
Refractive index	1,53	-	ISO 489

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