

TECHNICAL DATA SHEET

[English Units]



TOPAS[®] 6017S-04

Cyclic Olefin Copolymer (COC)

Injection molding grade. Highest heat deflection temperature among the TOPAS product family.
Suitable for applications requiring short-term, high temperature exposure.

Property	Value	Unit	Test Standard
Physical Properties			
Density	1020	kg/m ³	ISO 1183
Melt volume rate (MVR) (260°C, 2.16kg)	1,5	cm ³ /10min	ISO 1133
Melt flow rate (MFR) (260°C, 2.16kg)	1,4	g/10min	calculated
Water absorption (23°C-sat)	0,01	%	ISO 62
Mechanical Properties			
Tensile modulus (1mm/min)	440	kpsi	ISO 527-3
Tensile stress at break (5mm/min)	8400	psi	ISO 527-3
Tensile strain at break (5mm/min)	2,4	%	ISO 527-3
Charpy impact strength @ 23°C	7,1	ft-lbs/in ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	0,8	ft-lbs/in ²	ISO 179/1eA
Thermal Properties			
Glass transition temperature (10°C/min)	352	°F	ISO 11357-1,-2,-3
DTUL @ 0.45 MPa	338	°F	ISO 75-1, -2
Vicat softening temperature B50 (50°C/h 50N)	352	°F	ISO 306
Flammability @1.6mm nom. thickn.	HB	Class	UL94
Electrical Properties			
Relative permittivity at 1-10 kHz	2,35	-	IEC 60250
Relative permittivity at 1 GHz	2,30	-	IEC 60250
Dissipation factor at 1 GHz	6,0E-05	-	IEC 60250
Volume resistivity	>1E14	ohm×m	IEC 60093
Comparative tracking index CTI	>600	-	IEC 60112
Optical Properties			
Deg. of light transmission	91,0	%	ISO 13468-2
Refractive index (589nm, 25°C)	1,53	-	ISO 489

