

TECHNICAL DATA SHEET

[English Units]



TOPAS[®] 7010F-600

Cyclic Olefin Copolymer (COC)

Developmental extrusion grade, characterized by elevated temperature stability and robust processing behavior

Property	Value	Unit	Test Standard
Physical Properties			
Density	1020	kg/m ³	ISO 1183
Melt volume rate (MVR) (230°C, 2.16kg)	10,0	cm ³ /10min	ISO 1133
Melt volume rate (MVR) (190°C, 2.16kg)	0,8	cm ³ /10min	ISO 1133
Melt flow rate (MFR) (230°C, 2.16kg)	9,0	g/10min	calculated
Melt flow rate (MFR) (190°C, 2.16kg)	0,7	g/10min	calculated
Water absorption (23°C-sat)	0,01	%	ISO 62
Thermal Properties			
Glass transition temperature (10°C/min)	230	°F	ISO 11357-1,-2,-3
Mechanical Properties (Film)			
Tensile modulus (machine direction)	320	kpsi	ISO 527-3
Tensile modulus (transverse direction)	300	kpsi	ISO 527-3
Tensile strength @ break (machine direction)	8700	psi	ISO 527-3
Tensile strength @ break (transverse direction)	8300	psi	ISO 527-3
Elongation at break (machine direction)	3,6	%	ISO 527-3
Elongation at break (transverse direction)	3,5	%	ISO 527-3
Barrier Properties (Film)			
Water vapor permeability @ 38°C, 90% RH	0,25	g×mil/100in ² ×day	ISO 15106-3
Oxygen permeability @ 23°C, 50% RH	70	cm ³ ×mil/100in ² ×day	ASTM D3985
Test Specimen Production (Film)			
Type of extrusion	cast		
Thickness of specimen	3,94	mil	

