

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	cm ³ /10min	ISO 1133
Melt volume rate (MVR) (190°C, 2.16kg)	0,8	cm ³ /10min	ISO 1133
Thermal Properties			
Glass transition temperature (10°C/min)	110	°C	ISO 11357-1,-2,-3
Mechanical Properties (Film)			
Tensile modulus (machine direction)	2200	Mpa	ISO 527-3
Tensile modulus (transverse direction)	2100	Mpa	ISO 527-3
Tensile strength @ break (machine direction)	60	Mpa	ISO 527-3
Tensile strength @ break (transverse direction)	57	Mpa	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	1,0	g×100µm / m ² ×day	ISO 15106-3
Oxygen permeability @ 23°C, 50% RH	260	cm ³ ×100µm / m ² ×day×bar	ASTM D3985
Test Specimen Production (Film)			
Type of extrusion	cast		
Thickness of specimen	0,10	mm	

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