TECHNICAL DATA SHEET

[English Units]

TOPAS® 8007F-04

Cyclic Olefin Copolymer (COC)

Classic extrusion grade for pharmaceutical, medical and food packaging applications. Mainly used in coextruded cast film applications, e.g. blister film. Provides excellent clarity, high stiffness/modulus, exceptional water vapor barrier properties and good thermoformability.

Property	Value	Unit	Test Standard
Physical Properties			
Density	1010	kg/m³	ISO 1183
Melt volume rate (MVR) (230°C, 2.16kg)	12,0	cm³/10min	ISO 1133
Melt volume rate (MVR) (190°C, 2.16kg)	2,0	cm³/10min	ISO 1133
Melt flow rate (MFR) (230°C, 2.16kg)	10,8	g/10min	calculated
Melt flow rate (MFR) (190°C, 2.16kg)	1,8	g/10min	calculated
Water absorption (23°C-sat)	0,01	%	ISO 62
Thermal Properties			
Glass transition temperature (10°C/min)	172	°F	ISO 11357-1,-2,-3
Mechanical Properties (Film)			
Tensile modulus (machine direction)	320	kpsi	ISO 527-3
Tensile modulus (transverse direction)	260	kpsi	ISO 527-3
Tensile strength @ break (machine direction)	8300	psi	ISO 527-3
Tensile strength @ break (transverse direction)	7300	psi	ISO 527-3
Elongation at break (machine direction)	2,9	%	ISO 527-3
Elongation at break (transverse direction)	3,0	%	ISO 527-3
Elmendorf tear strength (machine direction)	225	g	ISO 6383-2
Elmendorf tear strength (transverse direction)	230	g	ISO 6383-2
Dart Drop Impact Strength, F50	<36	g	ISO 7765-1
Optical Properties (Film)			
Gloss, 60°	>100	%	ISO 2813
Haze	<1	%	ISO 14782
Barrier Properties (Film)			
Water vapor permeability @ 38°C, 90% RH	0,20	g×mil/100in²×day	ISO 15106-3
Oxygen permeability @ 23°C, 50% RH	50	cm³×mil/100in²×day	ASTM D3985
Test Specimen Production (Film)			
Type of extrusion	cast		
Thickness of specimen	2,76	mil	

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