

APEL™ APL6509T

Mitsui Chemicals America, Inc. - *Cyclic Olefin Copolymer*

General Information

General

Material Status	• Commercial: Active
Availability	• North America
Uses	• Film • Sheet
Forms	• Pellets

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.02		ASTM D792
Melt Mass-Flow Rate (MFR) (260°C/2.16 kg)	30	g/10 min	ASTM D1238
Molding Shrinkage - Flow	6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	8700	psi	ASTM D638
Tensile Elongation (Break)	60	%	ASTM D638
Flexural Modulus	363000	psi	ASTM D790
Flexural Strength	14500	psi	ASTM D790
Films	Nominal Value	Unit	Test Method
Water Vapor Transmission Rate	0.23	g·mil/100in ² /atm/24 hr	ASTM F1249
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	0.66	ft·lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	158	°F	ASTM D648
Glass Transition Temperature	176	°F	DSC
Optical	Nominal Value	Unit	Test Method
Refractive Index	1.540		ASTM D542
Light Transmittance	91.0	%	ASTM D1003
Haze	2.00	%	ASTM D1003

Additional Information

Unnotched Izod Impact, ASTM D256: 20 kJ/m²
TMA: 90°C

Notes

¹ Typical properties: these are not to be construed as specifications.

