Mitsui Chemicals

Grades and Properties of APEL

Properties	Test Method	Unit	APL8008T	APL6509T	APL6011T	APL6013T	APL6015T	APL5014DP	APL5514ML
TMA	MCI Method	°C	80	90	115	135	155	147	145
Tg	MCI Method	°C	70	80	105	125	145	135	135
Specific Gravity	ASTM D792	-	1.02	1.02	1.03	1.04	1.04	1.04	1.04
MFR (260°C, 2.16Kg)	ASTM D1238	g/10min	15	30	26	15	10	36	36
HDT (1.82MPa)	ASTM D648	°C	60	70	95	115	135	125	125
Tensile Strength at Yield	ASTM D638	MPa	50	60	60	60	60	60	60
Tensile Elongation at Break	ASTM D638	%	100	60	3	3	3	3	3
Flexural Modulus	ASTM D790	MPa	2400	2500	2700	3000	3200	3200	3200
Flexural Strength	ASTM D790	MPa	90	100	110	110	110	100	100
Izod Impact Strength									
notched	ASTM D256	J/m	45	35	25	25	25	25	25
w/o notched		kJ/m^2	33	20	15	15	10	10	10
Moisture Permeability	ASTM D1249	$g \cdot mm/m^2 \cdot d$	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Light Transmittance	ASTM D1003	%	91	91	90	90	90	90	90
Haze	ASTM D1003	%	2	2	3	3	4	2	0.5
Refractive Index	ASTM D542	n_D	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Mold Shrinkage (MD)	MCI Method	%	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Applications			Sheet, Film	Sheet, Film	Industrial Parts	Bottle	Medical Package	Optical Parts	Optical Parts (high reliability)