

				Basic	
Properties	Test Method	Terms	Units	M7020AD2	
				Optical Disk	
				-	
				-	
				-	
<b>Physical properties</b>					
Density	ISO 1183	-	g/cm <sup>3</sup>	1.20	
Water absorption		23degC, 50%RH	%	-	
		23degC, Underwater		0.24	
<b>Rheological properties</b>					
Melt Mass-flow Rate	ISO 1133		g/10min	63	
Melt Volume-flow Rate			cm <sup>3</sup> /10min	60	
			Temperature	degC	300
			Load	kgf	1.20
Moulding shrinkage (3.2mmt)	-	MD	%	0.4 - 0.6	
		TD		0.4 - 0.6	
<b>Mechanical properties</b>					
Tensile modulus	ISO 527-1 , 527-2		MPa	2400	
Yield stress				62	
Yield strain			%	6.5	
Nominal strain at break			-	80	
Stress at 50% strain			MPa	-	
Stress at break				-	
Strain at break				%	-
Flexural strength			ISO 178	-	MPa
Flexural modulus	2300				
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m <sup>2</sup>	NB	
Charpy notched impact strength		23 degC		7	
<b>Thermal properties</b>					
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa	degC	121	
		0.45MPa		136	
Coefficient of Linear thermal expansion	ISO 11359-2	MD	1/degC	6.5E-05	
		TD		6.6E-05	
Flammability	UL94	-	-	-	
<b>Electrical properties</b>					
Relative permittivity	IEC 60250	100Hz	-	3.1	
		1MHz	-	3.1	
Dissipation factor	IEC 60250	100Hz	-	0.0006	
		1MHz	-	0.0090	
Volume resistivity	IEC 60093	-	ohm-m	3.E+14	
Surface resistivity	IEC 60093	-	ohm	6.E+15	
Electric strength	IEC 602431	1mmt	MV/m	-	
		2mmt		24	
		3mmt		17	
Comparative tracking index (CTI)	UL746A	-	-	same as 2	
Note					
<b>Molding conditions -Examples of recommended molding conditions are shown below.-</b>					
Drying of feedstock resin				Hot air drying at 120℃---about 4-8 hours	
Cylinder temp (rear)			℃	280-340	
Cylinder temp (center)			℃	300-360	
Cylinder temp (front)			℃	320-390	
Nozzle temp			℃	310-390	
Mold temp			℃	50-130	
Injection pressure			MPa	50-150	
Screw rotation			rpm	200-400	