

# NOVAREX

Polycarbonate Resin

Properties	Test Method	Terms	Units	Basic		
				M7020AD2	7020R	7022R
				Optical Disk	High Flowability	Low Viscosity
				-	-	-
				-	-	-
				-	-	-
				-	-	-
<b>Physical properties</b>						
Density	ISO 1183	-	g/cm <sup>3</sup>	1.20	1.20	1.20
Water absorption		23degC, 50%RH 23degC, Underwater	%	- 0.24	- 0.24	- 0.24
<b>Rheological properties</b>						
Melt Mass-flow Rate	ISO 1133	Temperature	g/10min	63	19	14
Melt Volume-flow Rate			cm <sup>3</sup> /10min	60	18	13
			degC	300	300	300
		Load	kgf	1.20	1.20	1.20
Moulding shrinkage (3.2mmt)	-	MD TD	%	0.4 - 0.6 0.4 - 0.6	0.5 - 0.7 0.5 - 0.7	0.5 - 0.7 0.5 - 0.7
<b>Mechanical properties</b>						
Tensile modulus	ISO 527-1 , 527-2	-	MPa	2400	2400	2400
Yield stress			62	62	60	
Yield strain			%	6.5	6.6	6.9
Nominal strain at break			80	120	140	
Stress at 50% strain			MPa	-	-	-
Stress at break						
Strain at break			%	-	-	-
Flexural strength	ISO 178	-	MPa	93	93	93
Flexural modulus			2300	2300	2300	
Charpy impact strength	ISO 179-1 , 179-2	23 degC	kJ/m <sup>2</sup>	NB	NB	NB
Charpy notched impact strength		23 degC	kJ/m <sup>2</sup>	7	9	67
<b>Thermal properties</b>						
Temperature of deflection under load	ISO 75-1 , 75-2	1.80MPa 0.45MPa	degC	121 136	123 138	124 139
Coefficient of Linear thermal expansior	ISO 11359-2	MD TD	1/degC	6.5E-05 6.6E-05	6.5E-05 6.6E-05	6.5E-05 6.6E-05
Flammability	UL94	-	-	-	-	-
<b>Electrical properties</b>						
Relative permittivity	IEC 60250	100Hz	-	3.1	3.1	3.1
		1MHz	-	3.1	3.1	3.1
Dissipation factor	IEC 60250	100Hz	-	0.0006	0.0006	0.0006
		1MHz	-	0.0090	0.0090	0.0090
Volume resistivity	IEC 60093	-	ohm-m	3.E+14	3.E+14	3.E+14
Surface resistivity	IEC 60093	-	ohm	6.E+15	6.E+15	6.E+15
Electric strength	IEC 60243-1	1mmt		-	-	-
		2mmt	MV/m	24	24	24
		3mmt		17	17	17
Comparative tracking index (CTI)	UL746A	-	-	same as 2	same as 2	same as 2

The listed properties are portrayed as general information only and are not product specifications.

Mitsubishi Engineering-Plastics disclaims any liability in connection with the use of the information in