

Novarex M7027U Material Property Data Sheet

Properties	Testing Method	Conditions	Units	Property Data
				M7027U
Physical Properties				
Specific Gravity	ISO 1183		g/cm ³	1.20
Water Absorption			%	0.24
Rheological Properties				
Melt Mass Flow Rate (MFR)	ISO 1133	300°C - 1.2 kgf	g/10min	3.0
Melt Volume Flow Rate (MVR)			cm ³ /10min	2.9
Mold Shrinkage		MD	%	
	TD	%		
Mechanical Properties				
Tensile Modulus	ISO 527		MPa	2300
Yielding Stress			MPa	64
Strain at Yield			%	5.6
Strain at Break			%	84
Flexural Strength	ISO 178		MPa	101
Flexural Modulus			MPa	2300
Sharp Impact Strength	ISO179-1	Unnotched	kJ/m ²	NB
	ISO179-2	Notched		
Heat Properties				
Deflection Temperature Under Load	ISO 75	1.80MPa	°C	125
		0.45MPa	°C	137
Coefficient of Linear Expansion	Thermomechanical Analysis	MD	1/°C	6.5E-05
		TD	1/°C	6.6E-05
Electrical Properties				
Dielectric Constant	IEC 250	100Hz		3.1
		1MHz		3.1
Dielectric Dissipation Factor	IEC 250	100Hz		0.0006
		1MHz		0.0090
Volume Resistivity	IEC 93		Ω·m	3.0E+14
Surface Resistivity	IEC 93		Ω	6.0E+15
Dielectric Strength	IEC 243-1	1mmt	MV/m	
		2mmt	MV/m	24
		3mmt	MV/m	17
Tracking Resistance	IEC 112			