

Akulon® M-1016

PA66-GF33

33% Glass Reinforced, Heat Stabilized

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Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	9500 / 7500	MPa	ISO 527-1/-2
Stress at break	175 / 120	MPa	ISO 527-1/-2
Strain at break	3 / 5	%	ISO 527-1/-2
Flexural modulus	9000 / -	MPa	ISO 178
Flexural strength	260 / -	MPa	ISO 178
Charpy impact strength (+23°C)	80 / 100	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	70 / 70	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 20	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	10 / 10	kJ/m ²	ISO 179/1eA
Izod notched impact strength (+23°C)	14.5 / -	kJ/m ²	ISO 180/1A
Izod notched impact strength (-40°C)	9.5 / -	kJ/m ²	ISO 180/1A
Thermal properties	dry / cond		
Melting temperature (10°C/min)	260 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	246 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	260 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.7 / *	E-4/°C	ISO 11359-1/-2

Properties	Typical Data	Unit	Test Method
Electrical properties			
	dry / cond		
Relative permittivity (100Hz)	3.8 / 10	-	IEC 60250
Relative permittivity (1 MHz)	3.5 / 4.1	-	IEC 60250
Dissipation factor (100 Hz)	90 / 2800	E-4	IEC 60250
Dissipation factor (1 MHz)	160 / 800	E-4	IEC 60250
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 60093
Surface resistivity	- / 1E13	Ohm	IEC 60093
Electric strength	30 / 25	kV/mm	IEC 60243-1
Other properties			
	dry / cond		
Water absorption	8 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1380 / *	kg/m ³	ISO 1183