

Akulon[®] M-1016

PA66-GF33

33% Glass Reinforced, Heat Stabilized

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
RHEOLOGICAL PROPERTIES			
	<i>DRY / COND</i>		
Molding shrinkage (parallel)	0.4 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	<i>DRY / COND</i>		
Tensile modulus	10500 / 8000	MPa	ISO 527-1/-2
Stress at break	190 / 130	MPa	ISO 527-1/-2
Strain at break	3.7 / 5.5	%	ISO 527-1/-2
Flexural modulus	9250 / -	MPa	ISO 178
Flexural strength	270 / -	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)	14 / 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			
	<i>DRY / COND</i>		
Melting temperature (10°C/min)	260 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	248 / *	°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

Property Data

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<i>ELECTRICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Relative permittivity (100Hz)	3.8 / 10	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3.5 / 4.1	–	IEC 62631-2-1
Dissipation factor (100 Hz)	90 / 2800	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	160 / 800	E-4	IEC 62631-2-1
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 62631-3-1
Surface resistivity	– / 1E13	Ohm	IEC 62631-3-2
Electric strength	30 / 25	kV/mm	IEC 60243-1
<i>OTHER PROPERTIES</i>			
	<i>DRY / COND</i>		
Water absorption	8 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1390 / *	kg/m ³	ISO 1183