

Akulon[®] K224–HGM35

PA6—(GF+MD)40

15% Glass Reinforced, 25% Mineral Reinforced, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10500 / 5000	MPa	ISO 527-1/-2
Stress at break	135 / 70	MPa	ISO 527-1/-2
Strain at break	2.4 / 5	%	ISO 527-1/-2
Flexural modulus	10500 / 5600	MPa	ISO 178
Flexural strength	195 / 105	MPa	ISO 178
Charpy impact strength (+23°C)	40 / 40	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	40 / 35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	4.5 / 6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	3.5 / 3	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	205 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.35 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.5 / *	E-4/°C	ISO 11359-1/-2
ELECTRICAL PROPERTIES			
	DRY / COND		
Relative permittivity (100Hz)	3.5 / 14	—	IEC 62631-2-1
Relative permittivity (1 MHz)	3.3 / 4.5	—	IEC 62631-2-1
Dissipation factor (100 Hz)	50 / 3200	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	140 / 1200	E-4	IEC 62631-2-1
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 62631-3-1

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Surface resistivity	– / 1E13	Ohm	IEC 62631–3–2
Electric strength	35 / 30	kV/mm	IEC 60243–1
OTHER PROPERTIES	DRY / COND		
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1490 / *	kg/m³	ISO 1183