

Akulon[®] K227–XHG6

PA6–GF30

30% Glass Reinforced, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294–4
Molding shrinkage (normal)	0.9 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	9700 / 6100	MPa	ISO 527–1/–2
Stress at break	185 / 110	MPa	ISO 527–1/–2
Strain at break	4 / 7.5	%	ISO 527–1/–2
Flexural modulus	9000 / –	MPa	ISO 178
Flexural strength	290 / –	MPa	ISO 178
Charpy impact strength (+23°C)	90 / –	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	80 / –	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	14 / –	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	11 / –	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)	200 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	220 / *	°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
ELECTRICAL PROPERTIES			
	DRY / COND		
Relative permittivity (100Hz)	3.5 / 20	–	IEC 62631–2–1

Property Data

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Relative permittivity (1 MHz)	3.3 / 5	–	IEC 62631–2–1
Dissipation factor (100 Hz)	50 / 3000	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	150 / 1200	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 / 15	kV/mm	IEC 60243–1
Comparative tracking index	– / 500	V	IEC 60112
OTHER PROPERTIES	DRY / COND		
Water absorption	6.3 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1350 / –	kg/m³	ISO 1183