

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



Akulon® K227-XHG6

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/m ³	ISO 1183

