

Akulon® S223-G6-FC BK00001

PA66-GF30

30% Glass Reinforced, Food Contact Quality

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage [parallel]	0.2 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.2 / *	%	Sim. to ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	9500 / 7500	MPa	ISO 527-1/-2
Stress at break	190 / 140	MPa	ISO 527-1/-2
Strain at break	3 / 5	%	ISO 527-1/-2
Flexural modulus	8400 / -	MPa	ISO 178
Flexural strength	250 / -	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
Thermal properties			
	dry / cond		
Melting temperature (10°C/min)	260 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	245 / *	°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
Electrical properties			
	dry / cond		
Relative permittivity (100Hz)	3.8 / 11	-	IEC 62631-2-1



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Relative permittivity (1 MHz)	3.5 / 4.6	-	IEC 62631-2-1
Dissipation factor (100 Hz)	90 / 1400	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	160 / 1000	E-4	IEC 62631-2-1
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 62631-3-1
Surface resistivity	- / 1E14	Ohm	IEC 62631-3-2
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	600 / 600	V	IEC 60112

Other properties

dry / cond

Water absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m ³	ISO 1183

