

# Akulon<sup>®</sup> S223-G6

## PA66-GF30

30% Glass Reinforced

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<b>RHEOLOGICAL PROPERTIES</b>			
	<i>DRY / COND</i>		
Molding shrinkage [parallel]	0.2 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.2 / *	%	Sim. to ISO 294-4
<b>MECHANICAL PROPERTIES</b>			
	<i>DRY / COND</i>		
Tensile modulus	10000 / 7500	MPa	ISO 527-1/-2
Stress at break	205 / 140	MPa	ISO 527-1/-2
Strain at break	3.6 / 5	%	ISO 527-1/-2
Flexural modulus	9300 / 6400	MPa	ISO 178
Flexural strength	295 / 200	MPa	ISO 178
Charpy impact strength (+23°C)	80 / 100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	70 / 70	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 20	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	10 / 10	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL PROPERTIES</b>			
	<i>DRY / COND</i>		
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
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10

## Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Thickness tested	3 / *	mm	IEC 60695–11–10
<b><i>ELECTRICAL PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
Relative permittivity (100Hz)	3.8 / 11	–	IEC 62631–2–1
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
<b><i>OTHER PROPERTIES</i></b>			
	<b><i>DRY / COND</i></b>		
Water absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	1.6 / *	%	Sim. to ISO 62
Density	1360 / –	kg/m <sup>3</sup>	ISO 1183