

Akulon[®] S223–HG6

PA66–GF30

30% Glass Reinforced, Heat Stabilized

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	10000 / 6500	MPa	ISO 527–1/–2
Stress at break	205 / 125	MPa	ISO 527–1/–2
Strain at break	3.6 / 6	%	ISO 527–1/–2
Flexural modulus	9300 / 6400	MPa	ISO 178
Flexural strength	295 / 200	MPa	ISO 178
Tensile modulus (200°C)	3350	MPa	ISO 527–1/–2
Stress at break (200°C)	72	MPa	ISO 527–1/–2
Strain at break (200°C)	9.3	%	ISO 527–1/–2
Charpy impact strength (+23°C)	81 / 88	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	65 / 68	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 13	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	9 / 10	kJ/m²	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)	250 / *	°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

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
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
Thickness tested	3 / *	mm	IEC 60695–11–10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695–11–10
Thickness tested	0.75 / *	mm	IEC 60695–11–10

ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	3.8 / 10	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3.5 / 4.1	–	IEC 62631–2–1
Dissipation factor (100 Hz)	90 / 2800	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	160 / 800	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 / 25	kV/mm	IEC 60243–1
Comparative tracking index	500 / 500	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/m³	ISO 1183