Akulon®

Akulon® S223-DH

PA66

Low/Medium Viscosity, Nucleated, Heat Stabilized

Print Date: 2019-04-16

Properties	Typical Data	Unit	Test Method
Rheological properties	dry / cond		
Molding shrinkage (parallel)	0.95 / *	%	ISO 294-4
Molding shrinkage (normal)	0.95 / *	%	ISO 294-4
Mechanical properties	dry / cond		
Tensile modulus	3600 / 1500	MPa	ISO 527-1/-2
Nominal strain at break	10 / >50	%	ISO 527-1/-2
Yield stress	95 / 60	MPa	ISO 527-1/-2
Yield strain	3.5 / 20	%	ISO 527-1/-2
Flexural modulus	2800 / -	MPa	ISO 178
Flexural strength	125 / -	MPa	ISO 178
Charpy impact strength (+23°C)	N / N	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	N / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6 / 12	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	6 / 6	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)	85 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	1 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10

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Properties	Typical Data	Unit	Test Method
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.71 / *	mm	IEC 60695-11-10
Electrical properties	dry / cond		
Relative permittivity (100Hz)	3.2 / 15	-	IEC 60250
Relative permittivity (1 MHz)	3 / 4.3	-	IEC 60250
Dissipation factor (100 Hz)	60 / 2400	E-4	IEC 60250
Dissipation factor (1 MHz)	170 / 1200	E-4	IEC 60250
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 60093
Surface resistivity	* / 1E13	Ohm	IEC 60093
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	600 / 600	V	IEC 60112
Other properties	dry / cond		
Water absorption	8.5 / *	%	Sim. to ISO 62
Humidity absorption	2.3 / *	%	Sim. to ISO 62
Density	1140 / -	kg/m³	ISO 1183