

Akulon[®] S223–DH

PA66

Low/Medium Viscosity, Nucleated, Heat Stabilized

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
<i>RHEOLOGICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
Molding shrinkage (parallel)	0.95 / *	%	ISO 294–4
Molding shrinkage (normal)	0.95 / *	%	ISO 294–4
<i>MECHANICAL PROPERTIES</i>			
	<i>DRY / COND</i>		
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/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6 / 12	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	6 / 6	kJ/m ²	ISO 179/1eA
<i>THERMAL PROPERTIES</i>			
	<i>DRY / COND</i>		
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

Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Burning Behav. at 3.0 mm nom. thickn.	V-2 / *	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)	3.2 / 15	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3 / 4.3	–	IEC 62631-2-1
Dissipation factor (100 Hz)	60 / 2400	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	170 / 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 / 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/m ³	ISO 1183