Akulon® F223-D

Property Data

PA6-unfilled
Low/Medium Viscosity

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	**3200 / 1000**	MPa	ISO 527-1/-2
Yield stress	**85 / 45**	MPa	ISO 527-1/-2
Yield strain	**4 / 25**	%	ISO 527-1/-2
Nominal strain at break	**20 / >50**	%	ISO 527-1/-2
Flexural modulus	**2600 / -**	MPa	ISO 178
Flexural strength	**100 / -**	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)	**8 / 35**	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	**5 / 5**	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES	dry / cond		
Melting temperature (10°C/min)	**220 / ***	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	**65 / ***	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	**185 / ***	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	**0.9 / ***	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
Burning Behav. at thickness h	**V-2 / ***	class	IEC 60695-11-10
Thickness tested	**0.75 / ***	mm	IEC 60695-11-10
Oxygen index	**26 / ***	%	ISO 4589-1/-2
ELECTRICAL PROPERTIES	dry / cond		
Relative permittivity (100Hz)	**3.4 / 15**	-	IEC 60250
Relative permittivity (1 MHz)	**3.1 / 4.7**	-	IEC 60250
Dissipation factor (100 Hz)	**65 / 3900**	E-4	IEC 60250
Dissipation factor (1 MHz)	**165 / 1300**	E-4	IEC 60250
Volume resistivity	**1E13 / 1E10**	Ohm*m	IEC 60093
Surface resistivity	***/ 1E14**	Ohm	IEC 60093
Electric strength	**30 / 20**	kV/mm	IEC 60243-1
Comparative tracking index	***/ 600**	-	IEC 60112
OTHER PROPERTIES	dry / cond		
Water absorption	**10 / ***	%	Sim. to ISO 62

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Akulon® F223-D

Humidity absorption	**2.8 / ***	%	Sim. to ISO 62
Density	**1130 / -**	kg/m³	ISO 1183
MATERIAL SPECIFIC PROPERTIES	dry / cond		
Viscosity number	**129 / ***	cm³/g	ISO 307, 1157, 1628

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