

Akulon[®] F232–D

PA6

High Viscosity

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	3300 / –	MPa	ISO 527–1/–2
Nominal strain at break	25 / –	%	ISO 527–1/–2
Yield stress	85 / –	MPa	ISO 527–1/–2
Yield strain	4 / –	%	ISO 527–1/–2
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 / –	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	4 / –	kJ/m ²	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)	60 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	160 / *	°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)	1.4 / *	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
Thickness tested	3 / *	mm	IEC 60695–11–10
ELECTRICAL PROPERTIES			
	DRY / COND		
Relative permittivity (100Hz)	3.9 / 14	–	IEC 62631–2–1
Relative permittivity (1 MHz)	3.4 / 4.5	–	IEC 62631–2–1

Property Data

Akulon[®] F232–D

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Dissipation factor (100 Hz)	110 / 3000	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	220 / 1200	E–4	IEC 62631–2–1
Volume resistivity	1E13 / 1E10	Ohm*m	IEC 62631–3–1
Surface resistivity	– / 1E14	Ohm	IEC 62631–3–2
Electric strength	27 / 20	kV/mm	IEC 60243–1
Comparative tracking index	600 / 600	V	IEC 60112
OTHER PROPERTIES	DRY / COND		
Water absorption	10 / *	%	Sim. to ISO 62
Humidity absorption	3 / *	%	Sim. to ISO 62
Density	1130 / –	kg/m³	ISO 1183
MATERIAL SPECIFIC PROPERTIES	DRY / COND		
Viscosity number	214 / *	cm³/g	ISO 307, 1157, 1628