

Akulon[®] K225–KS

PA6 FR(30)

Flame Retardant (halogen free), Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	1.1 / *	%	ISO 294–4
Molding shrinkage (normal)	0.91 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	3800 / 1400	MPa	ISO 527–1/–2
Nominal strain at break	6 / >50	%	ISO 527–1/–2
Yield stress	80 / 40	MPa	ISO 527–1/–2
Yield strain	3.5 / 22	%	ISO 527–1/–2
Flexural modulus	3400 / 1300	MPa	ISO 178
Flexural strength	115 / 40	MPa	ISO 178
Charpy impact strength (+23°C)	95 / N	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	90 / 85	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	5 / 12	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	3 / 3	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)	75 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	180 / *	°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)	0.9 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Thickness tested	1.5 / *	mm	IEC 60695–11–10

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Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.4 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Oxygen index	40 / *	%	ISO 4589-1/-2
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	0.38 / –	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	1.5 / –	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	960 / –	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	0.38 / –	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	960 / –	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	1.5 / –	mm	IEC 60695-2-13

ELECTRICAL PROPERTIES

DRY / COND

Relative permittivity (100Hz)	3.3 / 8	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3.2 / 3.6	–	IEC 62631-2-1
Dissipation factor (100 Hz)	90 / 1250	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	200 / 800	E-4	IEC 62631-2-1
Volume resistivity	>1E13 / 1E11	Ohm*m	IEC 62631-3-1
Surface resistivity	– / 1E14	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	9 / *	%	Sim. to ISO 62
Humidity absorption	2.5 / *	%	Sim. to ISO 62

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Density	1180 / –	kg/m³	ISO 1183