

Akulon[®] K224–HG0

PA6–GF50

50% Glass Reinforced, Heat Stabilized

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294–4
Molding shrinkage (normal)	1.2 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	16000 / 12000	MPa	ISO 527–1/–2
Stress at break	230 / 160	MPa	ISO 527–1/–2
Strain at break	3 / 3.5	%	ISO 527–1/–2
Flexural modulus	16000 / –	MPa	ISO 178
Flexural strength	360 / –	MPa	ISO 178
Charpy impact strength (+23°C)	100 / 105	kJ/m ²	ISO 179/1eU
Charpy impact strength (–30°C)	85 / 85	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	22 / 25	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (–30°C)	15 / 15	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)	210 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.1 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.5 / *	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

Property Data

Akulon® K224–HG0

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Thickness tested	3 / *	mm	IEC 60695–11–10
Glow Wire Flammability Index GWFI	700 / –	°C	IEC 60695–2–12
GWFI (Thickness (1) tested)	2 / –	mm	IEC 60695–2–12
Glow Wire Flammability Index GWFI	700 / –	°C	IEC 60695–2–12
GWFI (Thickness (2) tested)	1.5 / –	mm	IEC 60695–2–12
Glow Wire Ignition Temperature GWIT	725 / –	°C	IEC 60695–2–13
GWIT (Thickness (1) tested)	2 / –	mm	IEC 60695–2–13
Glow Wire Ignition Temperature GWIT	725 / –	°C	IEC 60695–2–13
GWIT (Thickness (2) tested)	1.5 / –	mm	IEC 60695–2–13

ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	5.5 / 12	–	IEC 62631–2–1
Relative permittivity (1 MHz)	4.5 / 4.9	–	IEC 62631–2–1
Dissipation factor (100 Hz)	360 / 3250	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	270 / 770	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	35 / 25	kV/mm	IEC 60243–1
Comparative tracking index	600 / 600	V	IEC 60112

OTHER PROPERTIES	DRY / COND		
Water absorption	4.5 / *	%	Sim. to ISO 62
Humidity absorption	1.4 / *	%	Sim. to ISO 62
Density	1560 / –	kg/m³	ISO 1183