

# Akulon® K224-HG6

## PA6-GF30

30% Glass Reinforced, Heat Stabilized

Print Date: 2019-10-08

Properties	Typical Data	Unit	Test Method
<b>Rheological properties</b> dry / cond			
Molding shrinkage (parallel)	0.3 / *	%	ISO 294-4
Molding shrinkage (normal)	0.9 / *	%	ISO 294-4
<b>Mechanical properties</b> dry / cond			
Tensile modulus	9500 / 6000	MPa	ISO 527-1/-2
Stress at break	180 / 110	MPa	ISO 527-1/-2
Strain at break	3.5 / 7	%	ISO 527-1/-2
Flexural modulus	8600 / -	MPa	ISO 178
Flexural strength	235 / -	MPa	ISO 178
Charpy impact strength (+23°C)	90 / 110	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	75 / 75	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 25	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	11 / 11	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Thermal properties</b> dry / cond			
Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	207 / *	°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)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.7 / *	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 thickness h	HB / *	class	IEC 60695-11-10

Properties	Typical Data	Unit	Test Method
Thickness tested	0.75 / *	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)	3.5 / 20	-	IEC 60250
Relative permittivity (1 MHz)	3.3 / 5	-	IEC 60250
Dissipation factor (100 Hz)	50 / 3000	E-4	IEC 60250
Dissipation factor (1 MHz)	150 / 1200	E-4	IEC 60250
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 60093
Surface resistivity	- / 1E13	Ohm	IEC 60093
Electric strength	30 / 15	kV/mm	IEC 60243-1
Comparative tracking index	* / 500	V	IEC 60112

**Other properties**

dry / cond

Water absorption	6.3 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1350 / -	kg/m <sup>3</sup>	ISO 1183