

DSM Engineering Plastics - Property Data

Akulon® K224-PG3

(PA6+Imod)-GF15

Properties	Typical Data	Unit	Test Method
MECHANICAL PROPERTIES		dry / cond	
Tensile modulus	5600 / 2600	MPa	ISO 527-1/-2
Stress at break	105 / 60	MPa	ISO 527-1/-2
Strain at break	4 / 7	%	ISO 527-1/-2
Charpy impact strength (+23°C)	70 / 90	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	70 / 75	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	16 / 25	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	9 / 8	kJ/m²	ISO 179/1eA
THERMAL PROPERTIES		dry / cond	
Temp. of deflection under load (1.80 MPa)	195 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Burning Behav. at 1.6 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	IEC 60695-11-10
ELECTRICAL PROPERTIES		dry / cond	
Relative permittivity (100Hz)	3.6 / 14	-	IEC 60250
Relative permittivity (1 MHz)	3.3 / 4.5	-	IEC 60250
Dissipation factor (100 Hz)	100 / 1500	E-4	IEC 60250
Dissipation factor (1 MHz)	180 / 1200	E-4	IEC 60250
Volume resistivity	>1E13 / >1E13	Ωm*m	IEC 60093
Surface resistivity	* / >1E15	Ωm	IEC 60093
Electric strength	25 / 20	kV/mm	IEC 60243-1
Comparative tracking index	500 / 500	-	IEC 60112
OTHER PROPERTIES		dry / cond	
Water absorption	6.8 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1200 / -	kg/m³	ISO 1183

