

DSM Engineering Plastics - Property Data

Akulon® K224-PG8

(PA6+Imod)-GF40

40% Glass Reinforced, Impact Modified

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES			
	dry / cond		
Molding shrinkage (parallel)	0.25 / *	%	ISO 294-4
Molding shrinkage (normal)	1.1 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	dry / cond		
Tensile modulus	11500 / 6700	MPa	ISO 527-1/-2
Stress at break	170 / 110	MPa	ISO 527-1/-2
Strain at break	4.5 / 8.5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	105 / 110	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	110 / 110	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	25 / 35	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	18 / 18	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES			
	dry / cond		
Temp. of deflection under load (1.80 MPa)	200 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°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)	0.65 / *	E-4/°C	ISO 11359-1/-2
ELECTRICAL PROPERTIES			
	dry / cond		
Relative permittivity (100Hz)	3.5 / 14	-	IEC 60250
Relative permittivity (1 MHz)	3.3 / 4.5	-	IEC 60250
Dissipation factor (100 Hz)	90 / 3000	E-4	IEC 60250
Dissipation factor (1 MHz)	150 / 1200	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	25 / 20	kV/mm	IEC 60243-1
Comparative tracking index	* / 600	-	IEC 60112
OTHER PROPERTIES			
	dry / cond		
Water absorption	4.9 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1430 / -	kg/m ³	ISO 1183

DSM Product

Unlimited. **DSM**

