

DSM Engineering Plastics - Property Data

Akulon® K222-KWGV4

PA6-GF20

Properties	Typical Data	Unit	Test Method
RHEOLOGICAL PROPERTIES		dry / cond	
Molding shrinkage (parallel)	0.6 / *	%	ISO 294-4
Molding shrinkage (normal)	1 / *	%	ISO 294-4
MECHANICAL PROPERTIES		dry / cond	
Tensile modulus	6200 / 2500	MPa	ISO 527-1/-2
Stress at break	80 / 45	MPa	ISO 527-1/-2
Strain at break	2.5 / 15	%	ISO 527-1/-2
Charpy impact strength (+23°C)	40 / 45	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	40 / 40	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	6 / 6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	5 / 4	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)	185 / *	°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.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
ELECTRICAL PROPERTIES		dry / cond	
Relative permittivity (100Hz)	4.3 / 10	-	IEC 60250
Relative permittivity (1 MHz)	3.8 / 3.9	-	IEC 60250
Dissipation factor (100 Hz)	130 / 3000	E-4	IEC 60250
Dissipation factor (1 MHz)	210 / 1000	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	*/ 1E14	Ohm	IEC 60093
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	*/ 475	-	IEC 60112
OTHER PROPERTIES		dry / cond	
Density	1360 / -	kg/m ³	ISO 1183

DSM Product

Unlimited. **DSM**

