

DSM Engineering Plastics - Property Data

Akulon® Ultraflow™ K-FKGS6

PA6-GF30

Properties	Typical Data	Unit	Test Method
MECHANICAL PROPERTIES		dry / cond	
Tensile modulus	11500 / 7000	MPa	ISO 527-1/-2
Stress at break	150 / 100	MPa	ISO 527-1/-2
Strain at break	2.5 / 5	%	ISO 527-1/-2
Charpy impact strength (+23°C)	60 / 60	kJ/m²	ISO 179/1eU
Charpy impact strength (-30°C)	60 / 60	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	13 / 15	kJ/m²	ISO 179/1eA
Charpy notched impact strength (-30°C)	12 / 11	kJ/m²	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)	205 / *	°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)	1.1 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.6 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
Burning Behav. at thickness h	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
ELECTRICAL PROPERTIES		dry / cond	
Relative permittivity (100Hz)	3.5 / 10	-	IEC 60250
Relative permittivity (1 MHz)	3.4 / 4	-	IEC 60250
Dissipation factor (100 Hz)	60 / 3000	E-4	IEC 60250
Dissipation factor (1 MHz)	120 / 700	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Comparative tracking index	425 / -	-	IEC 60112
OTHER PROPERTIES		dry / cond	
Water absorption	4.5 / *	%	Sim. to ISO 62
Humidity absorption	1.3 / *	%	Sim. to ISO 62
Density	1590 / -	kg/m³	ISO 1183

DSM Product

Unlimited. **DSM**

