

# Akulon<sup>®</sup> Ultraflow<sup>®</sup> K-FKGS6

## Property Data

### PA6-GF30 FR(17)

30% Glass Reinforced, Heat Stabilized, Flame Retardant, High Flow

Properties	Typical Data	Unit	Test Method
<b>MECHANICAL PROPERTIES</b>			
	dry / cond		
Tensile modulus	<b>11500 / 7000</b>	MPa	ISO 527-1/-2
Stress at break	<b>150 / 100</b>	MPa	ISO 527-1/-2
Strain at break	<b>2.5 / 5</b>	%	ISO 527-1/-2
Charpy impact strength (+23°C)	<b>60 / 60</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	<b>60 / 60</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	<b>13 / 15</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	<b>12 / 12</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL PROPERTIES</b>			
	dry / cond		
Melting temperature (10°C/min)	<b>220 / *</b>	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	<b>205 / *</b>	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	<b>215 / *</b>	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	<b>0.2 / *</b>	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	<b>1.1 / *</b>	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	<b>V-0 / *</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5 / *</b>	mm	IEC 60695-11-10
Burning Behav. at thickness h	<b>V-0 / *</b>	class	IEC 60695-11-10
Thickness tested	<b>0.75 / *</b>	mm	IEC 60695-11-10
<b>ELECTRICAL PROPERTIES</b>			
	dry / cond		
Relative permittivity (100Hz)	<b>3.5 / 10</b>	-	IEC 60250
Relative permittivity (1 MHz)	<b>3.4 / 4</b>	-	IEC 60250
Dissipation factor (100 Hz)	<b>60 / 3000</b>	E-4	IEC 60250
Dissipation factor (1 MHz)	<b>120 / 700</b>	E-4	IEC 60250
Volume resistivity	<b>1E13 / 1E11</b>	Ohm*m	IEC 60093
Surface resistivity	<b>* / 1E14</b>	Ohm	IEC 60093
Comparative tracking index	<b>- / 425</b>	-	IEC 60112
<b>OTHER PROPERTIES</b>			
	dry / cond		
Water absorption	<b>4.5 / *</b>	%	Sim. to ISO 62
Humidity absorption	<b>1.3 / *</b>	%	Sim. to ISO 62
Density	<b>1590 / -</b>	kg/m <sup>3</sup>	ISO 1183

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