

# Akulon<sup>®</sup> Care K1G6

## PA6–GF30

30% Glass Reinforced, Medical grade, Food Contact Quality

Print Date: 2024–09–17

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
<b>RHEOLOGICAL PROPERTIES</b>			
	<b>DRY / COND</b>		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294–4
Molding shrinkage (normal)	0.9 / *	%	ISO 294–4
<b>MECHANICAL PROPERTIES</b>			
	<b>DRY / COND</b>		
Tensile modulus	9500 / 6000	MPa	ISO 527–1/–2
Stress at break	180 / 110	MPa	ISO 527–1/–2
Strain at break	3.5 / 7	%	ISO 527–1/–2
Flexural modulus	8600 / –	MPa	ISO 178
Flexural strength	235 / –	MPa	ISO 178
Charpy impact strength (+23°C)	90 / 110	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (–30°C)	75 / 75	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	12 / 25	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (–30°C)	11 / 11	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL PROPERTIES</b>			
	<b>DRY / COND</b>		
Melting temperature (10°C/min)	220 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	200 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	220 / *	°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)	0.7 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695–11–10
Thickness tested	1.5 / *	mm	IEC 60695–11–10
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695–11–10

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## Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10

### *ELECTRICAL PROPERTIES*

#### *DRY / COND*

Relative permittivity (100Hz)	3.5 / 20	–	IEC 62631-2-1
Relative permittivity (1 MHz)	3.3 / 5	–	IEC 62631-2-1
Dissipation factor (100 Hz)	50 / 3000	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	150 / 1200	E-4	IEC 62631-2-1
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 62631-3-1
Surface resistivity	– / 1E14	Ohm	IEC 62631-3-2
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	* / 600	V	IEC 60112

### *OTHER PROPERTIES*

#### *DRY / COND*

Water absorption	6.3 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1350 / –	kg/m <sup>3</sup>	ISO 1183

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