

Akulon[®] Ultraflow XG–FKGS6

PA6–GF30 FR(40)

30% Glass Reinforced, Flame Retardant (halogen free)

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage [parallel]	0.2 / *	%	Sim. to ISO 294–4
Molding shrinkage [normal]	0.6 / *	%	Sim. to ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	11500 / 7500	MPa	ISO 527–1/–2
Stress at break	155 / 95	MPa	ISO 527–1/–2
Strain at break	3 / 4	%	ISO 527–1/–2
Flexural modulus	11200 / 7850	MPa	ISO 178
Flexural strength	230 / 160	MPa	ISO 178
Charpy impact strength (+23°C)	65 / 65	kJ/m²	ISO 179/1eU
Charpy impact strength (–30°C)	55 / 45	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 12	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	9.5 / 9	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
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
Thermal conductivity in plane	0.45	W/(m K)	ASTM E1461
Thermal conductivity through plane	0.4	W/(m K)	ASTM E1461
Burning Behav. at 1.5 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Thickness tested	1.5 / *	mm	IEC 60695–11–10

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PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
Burning Behav. at 3.0 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
Burning Behav. at 0.4 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.4 / *	mm	IEC 60695-11-10
Burning Behav. at 0.75 mm nom. thickn.	V-0 / *	class	IEC 60695-11-10
Thickness tested	0.75 / *	mm	IEC 60695-11-10
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695-2-12
GWFI (Thickness (1) tested)	1.6 / –	mm	IEC 60695-2-12
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695-2-12
GWFI (Thickness (2) tested)	0.8 / –	mm	IEC 60695-2-12
Glow Wire Ignition Temperature GWIT	775 / –	°C	IEC 60695-2-13
GWIT (Thickness (1) tested)	1.6 / –	mm	IEC 60695-2-13
Glow Wire Ignition Temperature GWIT	775 / –	°C	IEC 60695-2-13
GWIT (Thickness (2) tested)	1 / –	mm	IEC 60695-2-13
ELECTRICAL PROPERTIES		DRY / COND	
Electric strength	40 / –	kV/mm	IEC 60243-1
Comparative tracking index	600 / 600	V	IEC 60112
OTHER PROPERTIES		DRY / COND	
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1470 / –	kg/m³	ISO 1183