

Akulon[®] SG–KGS5/HV

PA66–GF25 FR(40)

25% Glass Reinforced, High Flow, Halogen free and free of red phosphorous

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.3 / *	%	ISO 294–4
Molding shrinkage (normal)	1.04 / *	%	ISO 294–4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	10000 / 7000	MPa	ISO 527–1/–2
Stress at break	140 / 100	MPa	ISO 527–1/–2
Strain at break	3.2 / 4	%	ISO 527–1/–2
Flexural modulus	8650 / 6400	MPa	ISO 178
Flexural strength	225 / 155	MPa	ISO 178
Charpy impact strength (+23°C)	65 / 70	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	9 / 13	kJ/m ²	ISO 179/1eA
THERMAL PROPERTIES			
	DRY / COND		
Melting temperature (10°C/min)	260 / *	°C	ISO 11357–1/–3
Temp. of deflection under load (1.80 MPa)	245 / *	°C	ISO 75–1/–2
Temp. of deflection under load (0.45 MPa)	260 / *	°C	ISO 75–1/–2
Coeff. of linear therm. expansion (parallel)	0.31 / *	E–4/°C	ISO 11359–1/–2
Coeff. of linear therm. expansion (normal)	0.77 / *	E–4/°C	ISO 11359–1/–2
Burning Behav. at 1.5 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Burning Behav. at 3.0 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Burning Behav. at 0.4 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Burning Behav. at 0.75 mm nom. thickn.	V–0 / *	class	IEC 60695–11–10
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695–2–12

Property Data

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<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
GWFI (Thickness (1) tested)	0.75 / –	mm	IEC 60695–2–12
Glow Wire Flammability Index GWFI	960 / –	°C	IEC 60695–2–12
GWFI (Thickness (2) tested)	3 / –	mm	IEC 60695–2–12
Glow Wire Ignition Temperature GWIT	800 / –	°C	IEC 60695–2–13
GWIT (Thickness (1) tested)	0.75 / –	mm	IEC 60695–2–13
Glow Wire Ignition Temperature GWIT	825 / –	°C	IEC 60695–2–13
GWIT (Thickness (2) tested)	3 / –	mm	IEC 60695–2–13
<i>ELECTRICAL PROPERTIES</i>	<i>DRY / COND</i>		
Volume resistivity	>1E13 / –	Ohm*m	IEC 62631–3–1
Electric strength	40 / 34	kV/mm	IEC 60243–1
Comparative tracking index	600 / –	V	IEC 60112
<i>OTHER PROPERTIES</i>	<i>DRY / COND</i>		
Water absorption	5.2 / *	%	Sim. to ISO 62
Humidity absorption	1.7 / *	%	Sim. to ISO 62
Density	1390 / –	kg/m ³	ISO 1183