

Akulon® HR-HG7

PA66-GF35

35% Glass Reinforced, Heat Stabilized, Hydrolysis resistant

Print Date: 2019-04-11

Properties	Typical Data	Unit	Test Method
Rheological properties			
	dry / cond		
Molding shrinkage [parallel]	0.2 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1 / *	%	Sim. to ISO 294-4
Mechanical properties			
	dry / cond		
Tensile modulus	11500 / 7550	MPa	ISO 527-1/-2
Stress at break	210 / 140	MPa	ISO 527-1/-2
Strain at break	3.5 / 5.8	%	ISO 527-1/-2
Flexural modulus	9400 / -	MPa	ISO 178
Flexural strength	270 / -	MPa	ISO 178
Charpy impact strength (+23°C)	89 / 95	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	74 / 74	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	14 / 18	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	11 / 11	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)	247 / *	°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)	0.2 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.6 / *	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 thickness h	HB / *	class	IEC 60695-11-10

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Thickness tested	0.71 / *	mm	IEC 60695-11-10
Electrical properties	dry / cond		
Relative permittivity (100Hz)	4 / 10	-	IEC 60250
Relative permittivity (1 MHz)	3.6 / 4	-	IEC 60250
Dissipation factor (100 Hz)	50 / 3000	E-4	IEC 60250
Dissipation factor (1 MHz)	140 / 1000	E-4	IEC 60250
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 60093
Surface resistivity	* / 1E13	Ohm	IEC 60093
Electric strength	35 / 30	kV/mm	IEC 60243-1
Comparative tracking index	500 / 500	V	IEC 60112
Other properties	dry / cond		
Water absorption	5.5 / *	%	Sim. to ISO 62
Humidity absorption	1.5 / *	%	Sim. to ISO 62
Density	1410 / -	kg/m ³	ISO 1183