Property Data (Provisional)

Envalior
Imagine the Future

Akulon® HR–HG7

PA66–GF35

35% Glass Reinforced, Heat Stabilized, Hydrolysis resistant

Print Date: 2024–03–27

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/m²	ISO 179/1eU
Charpy impact strength (–30°C)	74 / 74	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	14 / 18	kJ/m²	ISO 179/1eA
Charpy notched impact strength (–30°C)	11 / 11	kJ/m²	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
ELECTRICAL PROPERTIES	DRY / COND		
Relative permittivity (100Hz)	4 / 10	–	IEC 62631–2–1

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PROPERTIES	*TYPICAL DATA*	*UNIT*	*TEST METHOD*
Relative permittivity (1 MHz)	3.6 / 4	–	IEC 62631–2–1
Dissipation factor (100 Hz)	50 / 3000	E–4	IEC 62631–2–1
Dissipation factor (1 MHz)	140 / 1000	E–4	IEC 62631–2–1
Volume resistivity	1E12 / 1E10	Ohm*m	IEC 62631–3–1
Surface resistivity	– / 1E13	Ohm	IEC 62631–3–2
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/m³	ISO 1183