

Durethan® BKV130GIT 900116
PA*-I-GF30

Envalior

Injection Molding, 30% Glass Reinforced, Improved Impact

ISO 1043 PA*-I-GF30

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	8800 / 5000	MPa	ISO 527
Stress at Break	160 / 95	MPa	ISO 527
Strain at Break	3.5 / 8.9	%	ISO 527
Impact Strength (Charpy), +23°C	85 / 85	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	65 / 60	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	15 / 20	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	10 / 10	kJ/m ²	ISO 179/1eA
Puncture - maximum force, +23°C	919 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	772 / -	N	ISO 6603-2
Puncture energy, +23°C	9 / 13	J	ISO 6603-2
Puncture energy, -30°C	6 / -	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	213 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	190 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-
Oxygen index	24 / *	%	ISO 4589-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.5 / 12	-	IEC 62631-2-1
Relative permittivity, 1MHz	4 / 4.5	-	IEC 62631-2-1
Dissipation Factor, 100Hz	70 / 1600	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	200 / 900	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E14	Ohm	IEC 62631-3-2
Electric Strength	32 / 32	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6.5 / *	%	Sim. to ISO 62
Humidity absorption	1.9 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m ³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	134 / *	cm ³ /g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	260 - 290	°C	-
Mold temperature	80 - 100	°C	-

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Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Impact modified

Injection Molding

PREPROCESSING

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 260 - 290 °C

Mold temperature: 80 - 100 °C