

Durethan BLUEBKV60H2.0EF 900116
PA6-GF60

Envalior

ISO 16396-PA 6,GF60 (R),GHR,S10-220

PA 6, 60% glass fibers, injection molding, improved flowability, heat-aging stabilized, 90% sustainable raw materials - recycled

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.4 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	20000 / 12000	MPa	ISO 527
Stress at Break	225 / 145	MPa	ISO 527
Strain at Break	2.4 / 3.5	%	ISO 527
Impact Strength (Charpy), +23°C	90 / 90	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	90 / 90	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	16 / 23	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	16 / 15	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	1250 / 1350	N	ISO 6603-2
Puncture - maximum force, -30°C	1100 / 1150	N	ISO 6603-2
Puncture energy, +23°C	3.1 / 4.7	J	ISO 6603-2
Puncture energy, -30°C	2.2 / 2.2	J	ISO 6603-2
Flexural Modulus (23°C)	19300 / 12800	MPa	ISO 178
Flexural strength	365 / 235	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	16 / 20	kJ/m²	ISO 180/1A
Notched Impact Strength (Izod)	16 / 15	kJ/m²	ISO 180/1A
Temperature	-30	°C	-
Impact Strength (Izod), 23°C	80 / 80	kJ/m²	ISO 180/1U
Ball Indentation Hardness	255 / 155	MPa	ISO 2039-1

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	213 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	220 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	12 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	75 / *	E-6/K	ISO 11359-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	5.3 / 11.2	-	IEC 62631-2-1
Relative permittivity, 1MHz	4.7 / 5.1	-	IEC 62631-2-1
Dissipation Factor, 100Hz	164 / 2150	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	177 / 651	E-4	IEC 62631-2-1
Volume Resistivity	5.8E12 / 8E9	Ohm*m	IEC 62631-3-1
Electric Strength	33 / 33	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	3.6 / *	%	Sim. to ISO 62
Humidity absorption	1.3 / *	%	Sim. to ISO 62
Density	1700 / -	kg/m³	ISO 1183
Bulk density	750	kg/m³	-

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

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Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.15	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Characteristics

Processing

Injection Molding

Special Characteristics

Heat aging stabilized

Delivery form

Pellets

Certifications

Recycled Resin Content, ISCC Plus

Additives

Release agent

Injection Molding

PREPROCESSING

Residual moisture content: 0.05 - 0.15%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 270 - 290 °C

Mold temperature: 80 - 120 °C