

Durethan® BKV20GW1 901317 PA6-GF20

Envalior

Injection Molding, 20% Glass Reinforced, Excellent Surface Properties

ISO 1043 PA6-GF20

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	7600 / 4700	MPa	ISO 527
Stress at Break	150 / 100	MPa	ISO 527
Strain at Break	3 / 7	%	ISO 527
Impact Strength (Charpy), +23°C	45 / 60	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	40 / 40	kJ/m ²	ISO 179/1eU
Puncture energy, +23°C	5 / 10	J	ISO 6603-2
Puncture energy, -30°C	4 / -	J	ISO 6603-2

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)	193 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	213 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	23 / *	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	89 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nom. Thickn.	HB / *	class	UL 94
Thickness tested	1.5 / *	mm	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.1 / 9.34	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.74 / 4.27	-	IEC 62631-2-1
Dissipation Factor, 100Hz	80 / 2200	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	180 / 650	E-4	IEC 62631-2-1
Volume Resistivity	>1E13 / 1E10	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 2E13	Ohm	IEC 62631-3-2

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1280 / -	kg/m ³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	140 / *	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	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

Characteristics

Processing

Injection Molding

Additives

Release agent

Durethan® BKV20GW1 901317
PA6-GF20

Envalior

Delivery form

Pellets

Special Characteristics

UV stablized

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): 270 - 290 °C

Mold temperature: 80 - 120 °C
