Durethan BKV20GW1 901317

PA6-GF20 — LANXESS Deutschland GmbH

PA 6, 20 % glass fibers, injection molding, weather stabilized, improved surface finish

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
Charpy impact strength (+23°C)	45 / 60	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	40 / 40	kJ/m²	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)	215 / *	°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	-
Burning behav. at thickness h	HB / *	class	UL 94
Thickness tested	0.8 / *	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/m³	ISO 1183

Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	140 / *	cm³/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

Characteristics

Processing
Injection Molding

Special Characteristics
UV stablized

Delivery form
Pellets

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

Disclaimer