LANXESS
Energizing Chemistry

ALBIS

Durethan BKV20FN20 000000

PA6-GF20 FR

LANXESS Deutschland GmbH

PA 6, 20 % glass fibers, injection molding, halogen free flame retardant, heat-aging stabilized

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	6100 / 3100	MPa	ISO 527
Stress at break	100 / 55	MPa	ISO 527
Strain at break	3 / 15	%	ISO 527
Charpy impact strength (+23°C)	35 / 100	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	30 / -	kJ/m²	ISO 179/1eU

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)	185 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	40 / *	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.	V-2 / *	class	UL 94
Thickness tested	1.5 / *	mm	-
Burning behav. at thickness h	V-2 / *	class	UL 94
Thickness tested	0.8 / *	mm	-
Oxygen index	26.9 / *	%	ISO 4589-1/-2

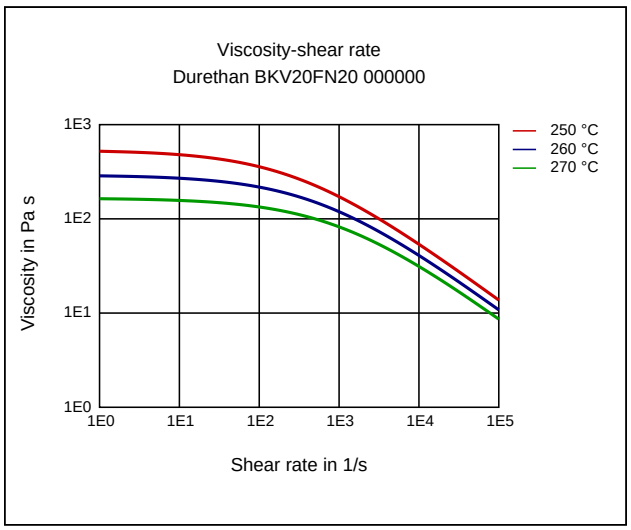
Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Volume resistivity	>1E13 / -	Ohm*m	IEC 62631-3-1
Electric strength	32 / -	kV/mm	IEC 60243-1
Comparative tracking index	525 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	7 / *	%	Sim. to ISO 62
Humidity absorption	2.1 / *	%	Sim. to ISO 62
Density	1310 / -	kg/m³	ISO 1183

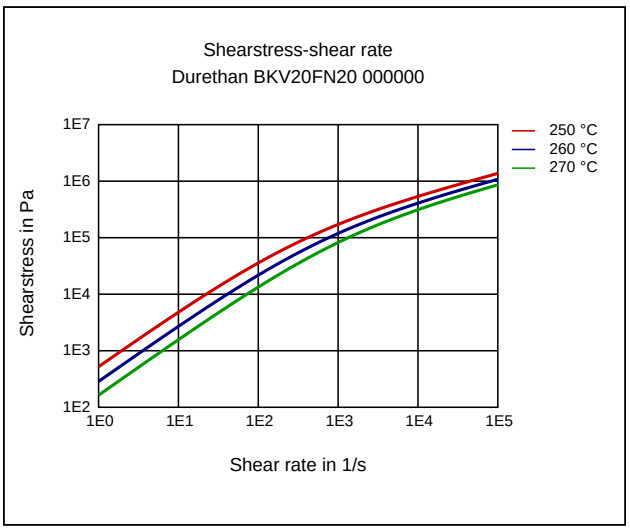
Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Diagrams

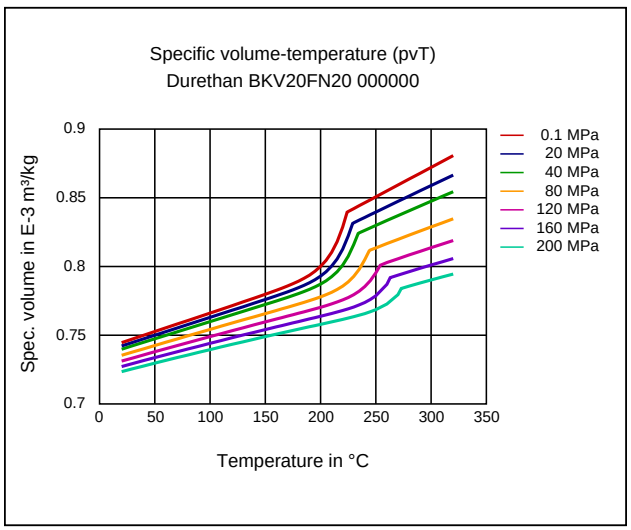
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Characteristics

Processing
Injection Molding

Special Characteristics
Flame retardant, Halogen-free, Heat aging stabilized

Delivery form
Pellets

Injection Molding

PREPROCESSING
Residual moisture content: 0.03-0.07 %
Drying temperature dry air dryer: 80 °C

Drying time dry air dryer: 2-6 h

PROCESSING
Melt temperature (Tmin - Tmax): 250-270 °C

Mold temperature: 80-100 °C

Disclaimer