Durethan® DPAKV30HREF 901510

PA66-GF30 Envalior

Injection Molding, 30% Glass Reinforced, Heat Stabilized, Hydrolysis resistant, Improved flow

ISO 1043 PA66-GF30

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.4 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	8200 / 5000	MPa	ISO 527
Stress at Break	150 / 100	MPa	ISO 527
Strain at Break	3.6 / 8	%	ISO 527
Impact Strength (Charpy), +23°C	80 / 80	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	70 / -	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	10 / -	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	774 / -	N	ISO 6603-2
Puncture - maximum force, -30°C	756 / -	N	ISO 6603-2
Puncture energy, +23°C	2.7 / -	J	ISO 6603-2
Puncture energy, -30°C	2.5 / -	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	263 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	240 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	250 / *	°C	ISO 75-1/-2

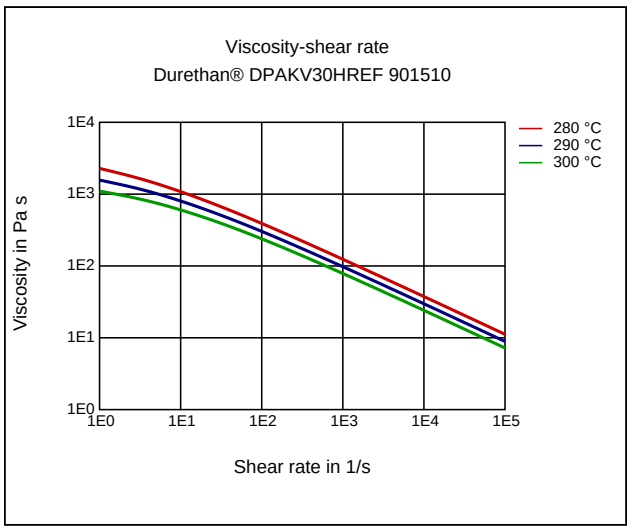
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1320 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	290	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

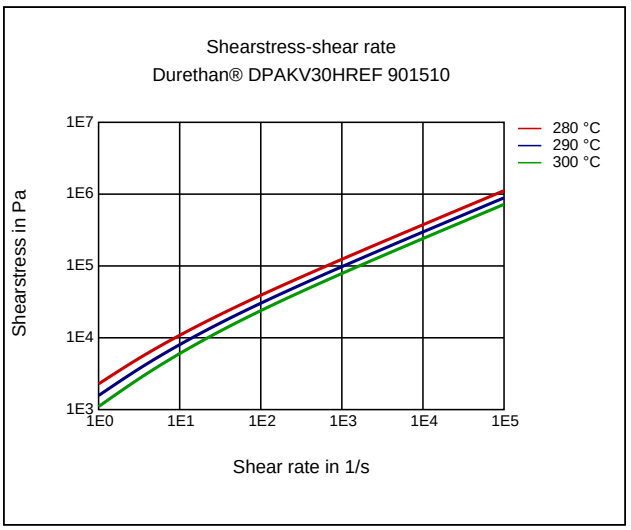
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 120	°C	-

Diagrams

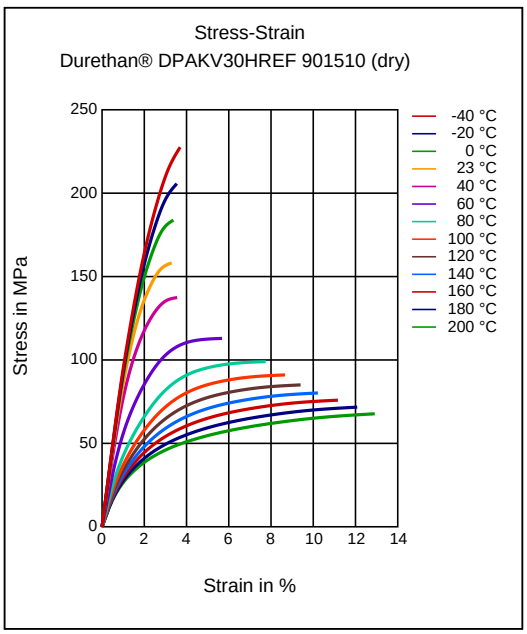
Viscosity-shear rate



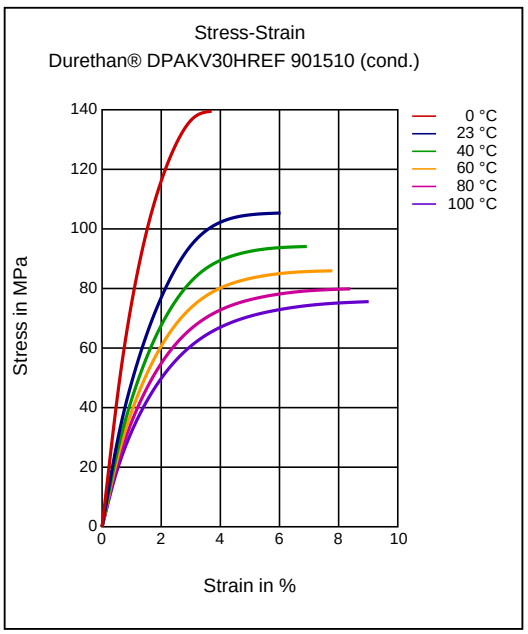
Shearstress-shear rate



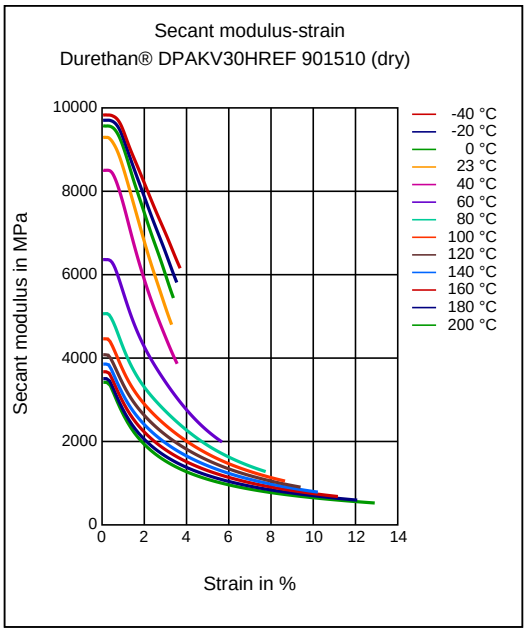
Stress-strain



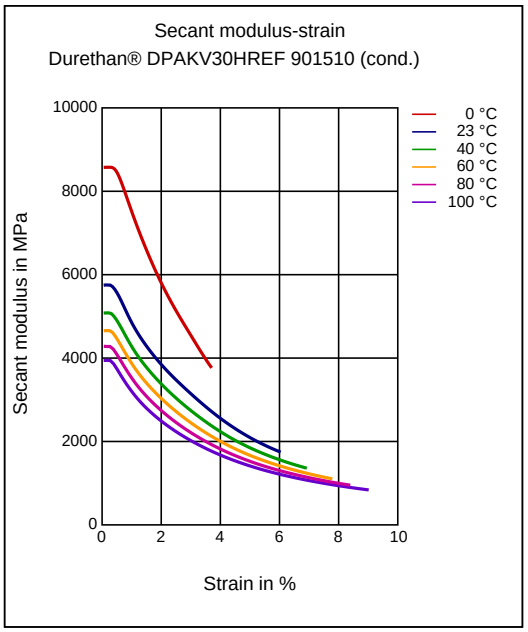
Stress-strain



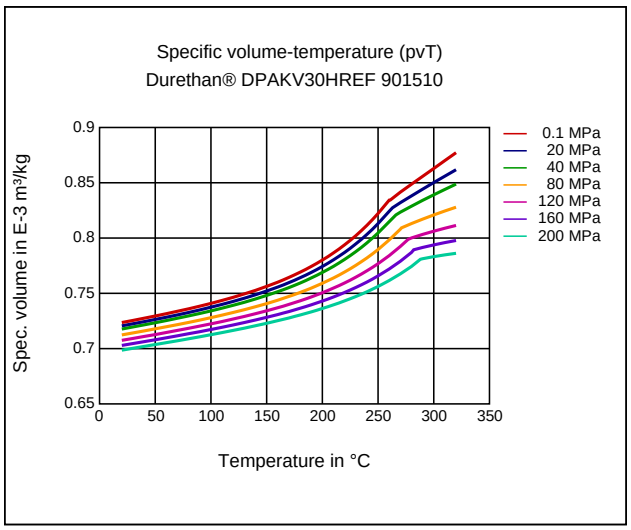
Secant modulus-strain



Secant modulus-strain



Specific volume-temperature (pvT)



Characteristics

Processing
Injection Molding

Special Characteristics
Heat aging stabilized

Delivery form
Pellets

Chemical Resistance
Hydrolysis

Additives
Release agent

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): 280 - 300 °C

Mold temperature: 80 - 120 °C

Disclaimer