Durethan® DP2801 000000

PA66 FR(30) Envalior

Injection Molding, Unreinforced, Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA66 FR(30)

Rheological properties	dry / cond	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	3500 / 1400	MPa	ISO 527
Yield stress	94 / 55	MPa	ISO 527
Yield strain	4.2 / 20	%	ISO 527
Nominal strain at break	10 / >50	%	ISO 527
Impact Strength (Charpy), +23°C	110 / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	120 / 185	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 15	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m²	ISO 179/1eA
Puncture - maximum force, +23°C	3730 / 4630	N	ISO 6603-2
Puncture - maximum force, -30°C	2400 / -	N	ISO 6603-2
Puncture energy, +23°C	13.1 / 27.2	J	ISO 6603-2
Puncture energy, -30°C	5.1 / -	J	ISO 6603-2

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	265 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	75 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Coeff. of Linear Therm. Expansion, parallel	70 / *	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	-
Oxygen index	30 / *	%	ISO 4589-1/-2

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1140 / -	kg/m³	ISO 1183

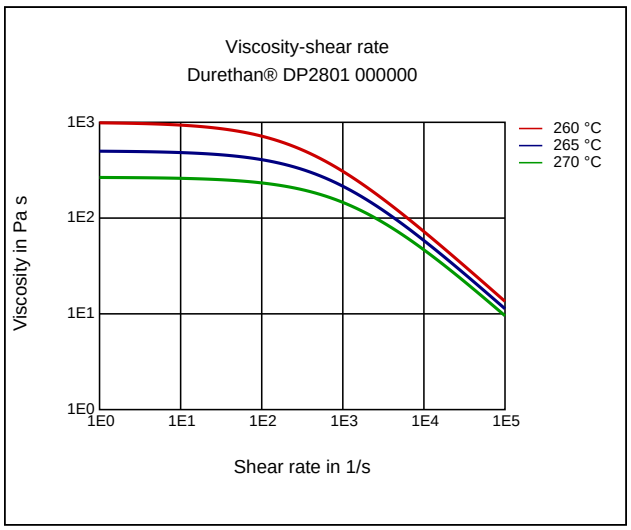
Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	133 / *	cm³/g	ISO 307, 1157, 1628

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

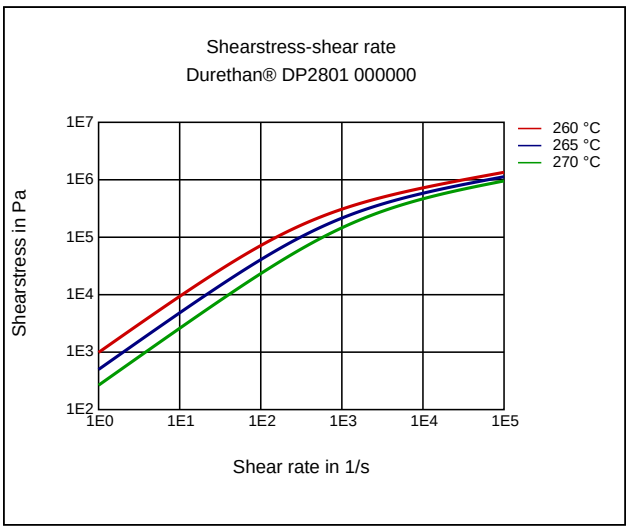
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.07	%	-
Melt temperature	260 - 270	°C	-
Mold temperature	80 - 100	°C	-

Diagrams

Viscosity-shear rate



Shearstress-shear rate



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): 260 - 270 °C
admissible residence time at Tmax <5 min
Mold temperature: 80 - 100 °C

Disclaimer

At all times, our standard terms and conditions of sale apply.