

**Durethan® DP2801 000000**  
**PA66 FR(30)**

Envalior

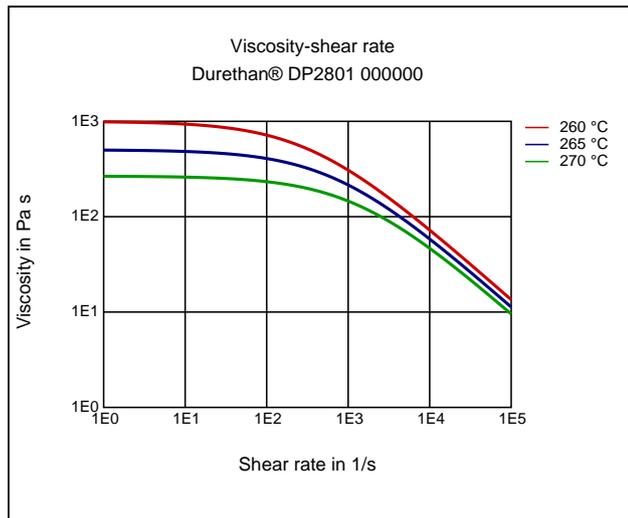
Injection Molding, Unreinforced, Flame Retardant (halogen free), Heat Stabilized

ISO 1043 PA66 FR(30)

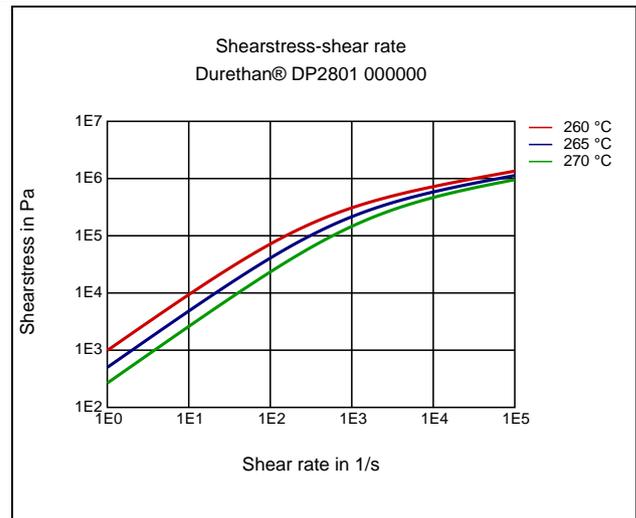
<b>Rheological properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Molding shrinkage, parallel	1.1 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.2 / *	%	ISO 294-4, 2577
<b>Mechanical Properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
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/m <sup>2</sup>	ISO 179/1eU
Impact Strength (Charpy), -30°C	120 / 185	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 15	kJ/m <sup>2</sup>	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m <sup>2</sup>	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
<b>Thermal Properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
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
<b>Electrical Properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Comparative tracking index	600 / -	-	IEC 60112
<b>Other Properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Density	1140 / -	kg/m <sup>3</sup>	ISO 1183
<b>Material Specific Properties</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Viscosity number	133 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628
<b>Test specimen production</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Injection Molding, melt temperature	260	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
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

### Delivery form

Pellets

### Special Characteristics

Flame retardant, Halogen-free, Heat aging stabilized

## 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

### Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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