Durethan® T40 000000

PA* Envalior

Injection Molding, Unreinforced, Blow Molding Grade, Film Extrusion, Extrusion, Transparent

ISO 1043 PA*

Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	3300 / 3000	MPa	ISO 527
Yield stress	110 / 90	MPa	ISO 527
Yield strain	6 / 5	%	ISO 527
Impact Strength (Charpy), +23°C	no break / no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	no break / no break	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	- / 10	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	- / 10	kJ/m²	ISO 179/1eA

Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	105 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	115 / *	°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	80 / *	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	-

Electrical Properties	dry / cond	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	4.3 / 4.6	-	IEC 62631-2-1
Relative permittivity, 1MHz	3.8 / 4	-	IEC 62631-2-1
Dissipation Factor, 100Hz	400 / 480	E-4	IEC 62631-2-1
Dissipation Factor, 1MHz	900 / 1100	E-4	IEC 62631-2-1
Volume Resistivity	1E13 / 1E13	Ohm*m	IEC 62631-3-1
Surface Resistivity	* / 1E15	Ohm	IEC 62631-3-2
Electric Strength	25 / 28	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	-	IEC 60112

Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water Absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1180 / -	kg/m³	ISO 1183

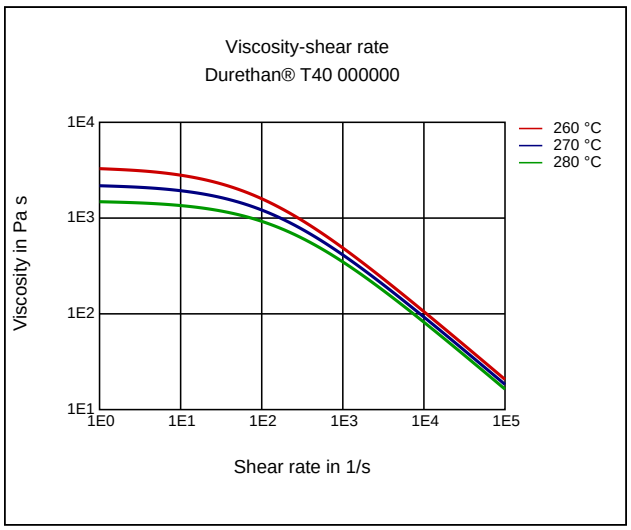
Material Specific Properties	dry / cond	Unit	Test Standard
ISO Data			
Viscosity number	107 / *	cm³/g	ISO 307, 1157, 1628

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

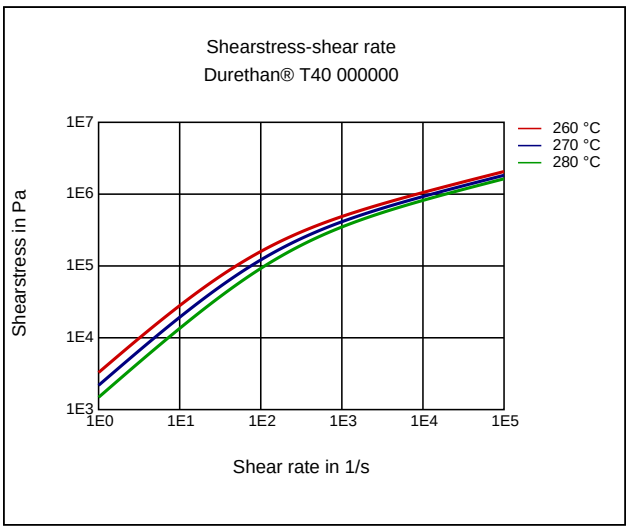
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	260 - 280	°C	-
Mold temperature	80 - 100	°C	-

Diagrams

Viscosity-shear rate



Shearstress-shear rate



Characteristics

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion

Special Characteristics

Transparent

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): 260 - 280 °C

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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- any bodily implant application for greater than 30 days

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