LANXESS
Energizing Chemistry

ALBIS

Durethan T40 000000

PA*

LANXESS Deutschland GmbH

PA 6I, non-reinforced, injection molding, extrusion

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
Charpy impact strength (+23°C)	no break / no break	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	no break / no break	kJ/m²	ISO 179/1eU

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	-
Burning behav. at thickness h	V-2 / *	class	UL 94
Thickness tested	0.8 / *	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

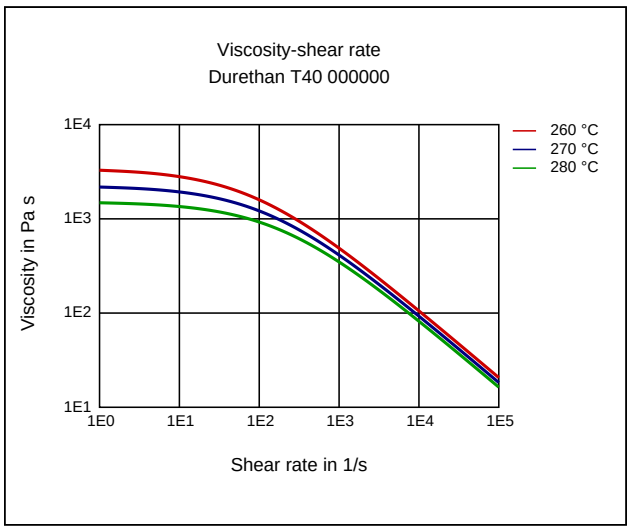
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	6 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1180 / -	kg/m³	ISO 1183

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

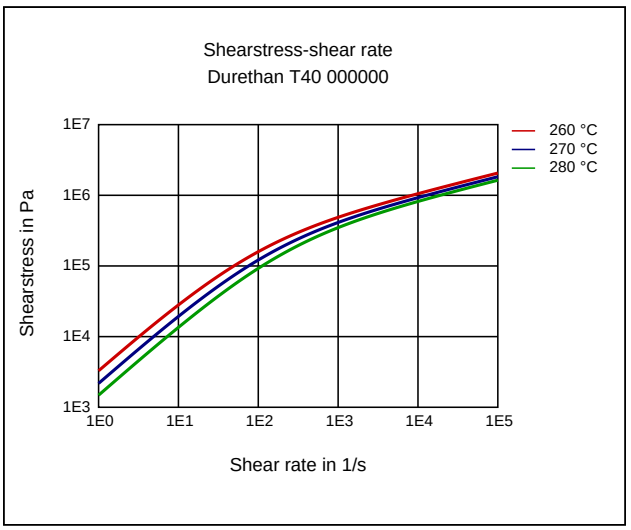
Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	270	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

Diagrams

Viscosity-shear rate



Shearstress-shear rate



Characteristics

Processing

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

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